

# INDIAN HEALTH FOCUS: Vone

2 0 1 2 E D I T I O N

#### INDIAN HEALTH SERVICE

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#### **PREFACE**

Since its inception, the Indian Health Service (IHS), an Agency of the Department of Health and Human Services, has striven to improve the health of American Indians and Alaska Native (Al/AN) women of all ages. Deaths due to cervical cancer among Al/AN women have decreased 82.6 percent from 1972-1974 to 2004-2006 data. Yet, breast cancer deaths increased 24.3 percent during the same period, a tragic loss which still requires continued effort to reverse this trend. While significant progress has been made in Women's Health, we know there is much more that needs to be accomplished to prevent additional loss of life and improve the healthy lifestyles for all Al/AN women.

This edition of "Indian Health Focus: Women" provides data about AI/AN women—narratives, tables, and charts—useful for researching and evaluating women's health interventions. Research leads our efforts as we improve the quality of our medical services.

I encourage you to use the data presented here to further advance programs in Women's Health. Together we can find ways to better prevent illnesses and premature mortality for a better future for AI/AN women.

Yvette Roubideaux, M.D., M.P.H. Acting Director

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#### **INTRODUCTION**

The Indian Health Service (IHS) is an agency of the Department of Health and Human Services (HHS). The IHS goal is to assure that comprehensive, culturally-acceptable personal and public health services are available and accessible to American Indian and Alaska Native (AI/AN) people. The mission of the IHS, in partnership with AI/AN people, is to raise their physical, mental, social, and spiritual health to the highest level.

The IHS has carried out its responsibilities through developing and operating a health services delivery system designed to provide a broad-spectrum program of preventive, curative, rehabilitative, and environmental services. This system integrates health services delivered directly through IHS facilities, purchased by IHS through contractual arrangements with providers in the private sector, and delivered through Tribally operated programs and Urban Indian health programs.

The IHS is concerned with the health of Al/AN of all ages. The IHS presents an overview of the health status of Al/AN in its monograph series, *Trends in Indian Health*. However, IHS recognizes that there are segments and conditions of the Al/AN population that require special attention, such as infants, youth, women, the elderly and injuries. This publication examines the health status of Al/AN women. It is based on data published in two major IHS publications: *Trends in Indian Health and Regional Differences in Indian Health*.

The population of interest for this publication is Al/AN women residing in the IHS service area. The IHS service area consists of counties on and near federal Indian reservations. The Al/AN people residing in the service area comprise about 57 percent of all Al/AN people residing in the U.S. It is estimated to be approximately 1.9 million in 2010 compared to 3.4 million in the entire U.S.

#### **SUMMARY OF DATA**

Al/AN women comprise 51 percent of the IHS service population, as is true for U.S. all races and white women in the population groups. However, Al/AN women are considerably younger than their counterparts in these populations. According to the 2000 census, 24.4 percent of Al/AN women are younger than 25 years of age and 3.2 percent are older than 64 years. The comparable percentages for U.S. all races women are 17.2 and 7.3, for U.S. white women the comparable percentages are 16.4 and 7.9. Al/AN women generally have a lower social and economic status than women in the U.S. general population. The 2000 census also showed that 11.7 percent of Al/AN women aged 16 and older are unemployed in contrast to 5.8 percent for the U.S. all races population.

Al/AN women on average give birth to children at younger ages than women in the U.S. general population. For Al/AN women, 39.1 percent are under age 20 when they have their first child. This compares to 20.6 percent for U.S. all races mothers and 19.0 percent for U.S. white mothers. Despite the large number of young mothers, low birthweight (less than 2,500 grams) occurs at lower rates among Al/AN women than it does for women in the U.S. all races and white populations. For Al/AN women, 7.1 percent of reported live births are of low birthweight, just below the level for the U.S. white population (7.2 percent). The percentage for U.S. all races population is considerably higher at 8.2. High birthweight (4,000 grams or more) are a relatively greater problem for Al/AN women than low birthweight. For Al/AN women, 10.5 percent of all babies in the IHS service area were high birthweight, compared to 8.1 percent for U.S. all races women and 9.0 percent for U.S. white women.

Al/AN women generally begin prenatal care later than women in the U.S. all races population. Prenatal care began in the first trimester for 66.6 percent of Al/AN live births. The Portland Area has the lowest percent (56.8) of mothers who received prenatal care in the first trimester, whereas, the California Area has the highest percent (74.8).

Al/AN women are more likely to exhibit risky behaviors during pregnancy than their counterparts in the U.S. all races population. For example, 16.8 percent of Al/AN women report that they smoke during pregnancy. Women in the U.S. all races population, in contrast, smoke at a lower rate during pregnancy, i.e., 12.0 percent. There is an established relationship between smoking and low birthweight births. Of all Al/AN low birthweight, 9.5 percent were to women who reported smoking during pregnancy. Alcohol consumption is another risky behavior more prevalent among Al/AN pregnant women. Partially as a result of behaviors (e.g., dietary) prior to pregnancy, Al/AN women giving birth are 1.6 times as likely to be persons with diabetes than U.S. all races women giving birth.

The life expectancy (adjusted to compensate for misreporting of Al/AN race on state death certificates) for Al/AN females is 6.4 years greater than it is for Al/AN males, i.e., 76.3 compared to 69.9. Therefore, it follows that Al/AN females die at relatively older ages than Al/AN males. The percentage of deaths pertaining to ages less than 45 is 21.2 percent for Al/AN females and 29.7 percent for males. However, for ages over 64, the female percentage is 52.3 compared to the male percentage of 39.3. Al/AN females die mainly from malignant neoplasms and diseases of the heart (the two leading causes of death). The same is true for U.S. all races and white females. These Al/AN counts have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

Substance abuse, especially alcohol, is a serious problem in many Al/AN communities. Although alcohol abuse is a more serious problem for Al/AN males than females, it still takes a considerable death toll among Al/AN females. The Al/AN female alcohol-related death rate peaks at 66.1 deaths per 100,000 population for age group 45 to 54 years. For U.S. all races and white females, the highest age-specific rate are 8.8 and 9.0 for age group 45 to 54 years old. In contrast to alcohol-related death rates, age-specific drug-related death rates for Al/AN females are near to those for Al/AN males. The highest female rate (34.6) occurs among the 35 to 44 year age group. Al/AN female age-specific rates are generally higher than those for U.S. all races and white females. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

Al/AN women are less likely to die from unintentional injuries, homicide, and suicide than Al/AN men, but, for most age groups, Al/AN women are more at risk from these causes than women in the U.S. general population. The age-specific death rate for unintentional injuries for Al/AN females is higher for all age groups in comparison to U.S. all races and white females. Al/AN female suicide rates are greater than those for U.S. all races and white females for age groups under 65 years. However, for older age groups, the Al/AN female rates are lower. The age specific homicide death rate for Al/AN females is lower for all age groups except 75 to 84 years and 85 years and older in comparison with Al/AN males. However, the Al/AN female rate is greater than the rate for U.S. all races and white females for all age groups except 75 to 84 and 85 years and older. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

Al/AN women die from diseases of the heart at lower rates than Al/AN men for all age groups, except 1 to 4 and 15 to 24 years and for chronic liver disease and cirrhosis for all age groups. The cerebrovascular diseases death rate is similar for Al/AN males and females among the various age groups, except for age groups 55 to 64 years and 85 years and over. Al/AN women are more likely to die from diabetes mellitus than in comparison to females in the U.S. all races and white populations. There is a significant disparity between the Al/AN female death rates and females rates for U.S. all races and white females for diseases of the heart and cerebrovascular diseases for all those 85 years and older. The Al/AN females death rates are noticeably lower for the elderly. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

Persons in the U.S. all races and white populations are more likely to die from malignant neoplasms than Al/AN. The leading site for cancer deaths among Al/AN women is trachea, bronchus, and lung. Eighty-three (83) percent more Al/AN women die of this type of cancer than the next leading site, breast. In turn, 55 percent more Al/AN women die from breast cancer than colon cancer, the third leading site. There is also a big drop in frequency of deaths from colon cancer to the fourth leading site, pancreas. In contrast, the next leading site (ovary) has a cancer mortality rate similar to pancreas. Women in the U.S. all races and white populations have different leading sites for cancer. The top five sites are diseases of heart, malignant neoplasms, cerebrovascular diseases, chronic obstructive pulmonary diseases and allied conditions. These Al/AN counts have been adjusted to compensate for misreporting of Al/AN race on state death.

#### **SOURCES AND LIMITATIONS OF DATA**

#### **POPULATION STATISTICS**

The IHS service population consists of AI/AN identified to be eligible for IHS services. IHS service population estimates are based on official U.S. Census Bureau county data. The Census Bureau enumerates those individuals who identify themselves as being American Indian or Alaska Native (as identified during the Census) who reside in the geographic areas in which IHS has responsibilities ("on or near" reservations, i.e., contract health service delivery areas [CHSDAs]). These people may or may not use IHS services.

IHS service populations between census years (e.g., 1990 and 2000) are estimated by a smoothing technique in order to show a gradual transition between census years. IHS service populations beyond the latest census year (2000) are projected through linear regression techniques, using the most current ten years of Al/AN birth and death data provided by the National Center for Health Statistics (NCHS). The natural change (estimated number of births minus estimated number of deaths) is applied to the latest census enumeration.

Registered AI/AN patients with at least one direct or contract inpatient stay, outpatient visit, or dental visit during the last three years are defined as users. IHS user population estimates are drawn from data in the IHS National Data Warehouse. First implemented in 1984 as the Patient Registration System, it functioned adequately for many years; but, in recent years, system changes resulted in registration record errors. New system-wide improvements were implemented dating back to August, 2001. Local facilities re-sent complete and up-to-date information for all patients who had ever received direct or contract health services from IHS or Tribally-operated programs to a central data repository. Data matching software was then applied to the information, allowing for the identification and removal of duplicate records. Thanks to the dedicated efforts of area statistical officers and information technologists alike, this publication contains some of the most accurate user population estimates ever produced.

The IHS user population estimates shown in this publication should be contrasted with the IHS service population (eligible population) estimates, which are shown in the *Trends in Indian Health* publication. The service population estimates are based on official U.S. Census Bureau county data, representing self-identified AI/AN people who may or may not use IHS services. IHS service populations between census years (e.g., 1990 and 2000) are estimated using a smoothing technique in order to show a gradual transition between census years. This normally results in upward revisions to service population figures projected prior to a census, since each Census tends to do a better job in enumerating AI/AN people. IHS service populations beyond the latest census year with available data are projected through linear regression techniques, using the most current ten years of AI/AN birth and death data provided by the NCHS, Centers for Disease Control and Prevention (CDC).

IHS user population figures are used for calculating IHS patient care rates. However, since state birth and death certificates do not provide information on use of IHS services, IHS service population figures are used in calculating AI/AN vital event rates for the IHS service areas.

The social and economic data contained in this publication are from the 2000 census and reflect the characteristics of persons self-identifying as Al/AN (alone).

#### **VITAL EVENT STATISTICS**

Al/AN vital event statistics are derived from data provided annually to the IHS by NCHS. Vital event statistics for the U.S. population were derived from data reported in various NCHS publications, CDC Wonder, as well as from some unpublished data from NCHS. NCHS obtains birth and death records for all U.S. residents from the state health departments, based on information reported on official state birth and death certificates. The records NCHS provides IHS contain the same basic demographic items as the vital event records maintained by NCHS for all U.S. residents, but with names, addresses, and record identification numbers deleted. It should be noted that Tribal identity is not recorded on these records. Tabulations of vital events for this publication are by place of residence.

The natality and mortality data are only as accurate as the reporting by the states to NCHS. NCHS does perform numerous edit checks, applies verification methods, and imputes values for non-responses.

#### **MISREPORTING OF RACE ON STATE DEATH CERTIFICATES**

Misreporting of Al/AN race on state death certificates occurs, especially in areas distant from traditional Al/AN reservations. In order to determine the degree and scope of the misreporting, IHS conducted a study utilizing the National Death Index (NDI) maintained by the NCHS. The study involved matching IHS patient records of those patients who could have died during 1986 through 1988 with all death records of U.S. residents for 1986 through 1988 as contained on the NDI. The study revealed that on 10.9 percent of the matched IHS-NDI records, the race reported for the decedent was other than Al/AN. The percentage of records with inconsistent classification of race ranged from 1.2 percent in the Navajo Area to 28.0 and 30.4 percent in the Oklahoma and California Areas, respectively.

The results of the NDI study provide sufficient numbers to calculate adjustments for each IHS Area, IHS overall, and selected age groups. In addition to these adjustments based on the study findings, IHS assumed the following; (a) the results from 1986-88 apply to other years, (b) IHS age-group adjustments applied also to each Area, and (c) the Area adjustments applied to the causes of death used in this publication (i.e. if an Area's total deaths needed to be increased by ten percent, than the deaths for each cause of death would also increase by this same rate). These assumptions cannot be statistically supported by the results of the study. However, IHS felt that it was necessary to adjust all of the death rates in this publication to provide a meaningful and comprehensive look at health status. IHS also believes that they are reasonable adjustments.

These NDI adjustments were used for the first time in the 1997 edition of this publication. Both unadjusted and adjusted information is shown, as applicable. The adjustments were applied to the results obtained from using an unadjusted death file.

IHS has more specific adjustment factors for the age group less than 1 year. These are derived from the linked birth/infant death data sets produced by the NCHS. In this edition (as was done for the first time in the 1997 edition with 1992-94 data), unadjusted and adjusted infant mortality rates will be shown for data years 1987 through 1998. It is reasonably assumed that data years for which linked data sets were not produced (NCHS did not produce linked data sets prior to data year 1983 and for data years 1992-94) may be adjusted based on the results from other linked data sets. These adjustments based on the linked data sets take precedent over the NDI adjustments for the less than 1 year age group, described above.

Indian Health Service, Department of Health and Human Service. Adjusting for Misreporting on Indian Race on the State Death Certificate. November 1996.

The AI/AN population is considerably younger than the U.S. all races population. Therefore, the death rates presented in this publication have been age adjusted, where applicable, so that appropriate comparisons can be made between these population groups. Two exceptions are the information presented for leading causes of death and leading cancer sites. In order to determine the leading causes of death or cancer sites for a population group, it is necessary to rank without any adjustment for age. However, it should be kept in mind that the ranking of causes of death or cancer sites for a population group is affected by its age composition.

The leading causes of death are shown for more detailed age groups in support of the IHS Director's initiatives on youth and elder care. In particular, the 1 to 14 year age group has been split into 1 to 4 and 5 to 14, and the 45 to 64 year age group has been split into 45 to 54 and 55 to 64.

#### **AGE-ADJUSTMENT**

The age adjusted death rates presented in this publication were computed by the direct method, that is, by applying the age specific death rate for a given cause of death to the standard population distributed by age. The total population as enumerated in 2000 was selected as the standard since this is the standard used by NCHS. The rates for the total population and for each race-sex group were adjusted separately, by using the same standard population. The age adjusted rates were based on ten year age groups. It is important **not** to compare age-adjusted death rates with crude rates.

#### **ICD-10-CODES**

The list of codes included in alcohol-induced causes was expanded in the 2003 data year to be more comprehensive. Alcoholism deaths are defined through the use of ICD-10 cause of death code groups; E24.4, Alcohol-induced pseudo-Cushing's syndrome; F10, Mental and behavioral disorders due to alcohol use; G31.2, Degeneration of nervous system due to alcohol; G62.1, Alcoholic polyneuropathy; G72.1, Alcoholic myopathy; I42.6, Alcoholic cardiomyopathy; K29.2, Alcoholic gastritis; K70, Alcoholic liver disease; K86.0, Alcohol-induced chronic pancreatitis; R78.0, Finding of alcohol in blood; X45, Accidental poisoning by and exposure to alcohol; X65, intentional self-poisoning by and exposure to alcohol; and Y15, Poisoning by and exposure to alcohol, undetermined intent. Alcohol-induced causes exclude accidents, homicides, and other causes indirectly related to alcohol use. This category also excludes newborn deaths associated with maternal alcohol use. To be consistent with NCHS, these additional codes are now used by IHS starting with the 2002-2003 edition. The NCHS definition includes all of the code groups previously used by IHS plus these new codes. The NCHS definition of alcoholism deaths is now used in all IHS publications, including *Regional Differences in Indian Health and Trends in Indian Health*.

NCHS is also now publishing drug-induced deaths with a definition that includes codes expanded in the 2003 data year to be more comprehensive. The complete list of causes of death attributable to drug-induced mortality now includes ICD-10 codes D52.1, Drug-induced folate deficiency anemia; D59.0, Drug-induced hemolytic anemia; D59.2, Drug-induced nonautoimmune hemolytic anemia; D61.1, Drug-induced aplastic anemia; D64.2, Secondary sideroblastic anemia due to drugs and toxins; E06.4.,

drug-induced thyroiditis; E16.0, Drug-induced hypoglycemia without coma; E23.1, Drug-induced hypopituitarism; E24.2, Drug-induced Cushing's syndrome; E27.3, Drug-induced adrenocortical insufficiency; E66.1, Drug-induced obesity; selected codes from the ICD-10 title Mental and behavioral disorders due to psychoactive substance use, specifically, F11-F11.5, F11.7-F11.9, F12-F12.5, F12.7-F12.9, F13-F13.5, F13.7-F13.9, F14-F14.5, F14.7-F14.9, F15-F15.5, F15.7-F15.9, F16-F16.5, F16.7-F16.9, F17, F17.3-F17.5, F17.7-F17.9, F18-F18.5, F18.7-F18.9, F19-F19.5, F19.7-F19.9; G21.1, Other drug-induced secondary parkinsonism; G24.0, Drug-induced dystonia; G25.1, Drug-induced tremor, G25.4, Druginduced chorea; G25.6, Drug-induced tics and other tics of organic origin; G44.4 Drug-induced headache, not elsewhere classified; G62.0; Drug-induced polyneuropathy; G72.0, Drug-induced myopathy; 195.2, Hypotension due to drugs; J70.2, Acute drug-induced interstitial lung disorders; J70.3, Chronic drug-induced interstitial lung disorders; J70.4, Drug-induced interstitial lung disorder, unspecified; L10.5, Drug-induced pemphigus; L27.0, Generalized skin eruption due to drugs and medicaments; L27.1, Localized skin eruption due to drugs and medicaments; M10.2, Drug-induced gout; M32.0, Drug-induced systemic lupus erythematosus; M80.4 Drug-induced osteoporosis with pathological fracture; M81.4, Drug-induced osteoporosis; M83.5, Other drug-induced osteomalacia in adults; M87.1, Osteonecrosis due to drugs; R78.1, Finding of opiate drug in blood; R78.2, Finding of cocaine in blood; R78.3, Finding of hallucinogen in blood; R78.4, Finding of psychotropic drug in blood; X40-X44, Accidental poisoning by and exposure to drugs, medicaments, and biological substances; X60-X64, Intentional self-poisoning (suicide) by and exposure to drugs, medicaments, and biological substances; X85, Assault (homicide) by drugs, medicaments, and biological substances; and Y10-Y14, Poisoning by and exposure to drugs, medicaments and biological substances, undetermined intent. Drug-induced causes exclude accidents, homicides, and other causes indirectly related to drug use. Also excluded are newborn deaths associated with mother's drug use. This NCHS definition of drug related deaths is now used in all IHS publications, including Regional Differences in Indian Health and Trends in Indian Health.

#### **PATIENT CARE STATISTICS**

Patient care statistics are derived from IHS reporting systems. There are four main patient care reporting systems. The Monthly Inpatient Services Report is a patient census report that is prepared by each IHS hospital. It indicates the number of discharges and days by type of service (e.g., adult, pediatric, obstetric, newborn), and is used for the direct inpatient workload statistics. The Inpatient Care System is the source of IHS hospital inpatient data pertaining to various patient characteristics (age, sex, principal diagnoses, other diagnoses, community of residence, etc.). The data are collected daily, one record per discharge. The Contract Care System is the source of similar contract hospital inpatient data.

The Ambulatory Patient Care System is the source of data pertaining to the number of ambulatory medical visits at IHS facilities by various patient characteristics (age, sex, clinical impression, community of residence, etc.). The data are collected daily, one record per ambulatory medical visit. The Contract Care System is the source of similar contract ambulatory medical visit data.

#### **SOURCES OF COPIES AND ADDITIONAL INFORMATION**

Additional AI/AN health status information can be obtained from the IHS Division of Program Statistics. Specific responsibilities are as follows:

General Information

Kirk Greenway, Principal Statistician and Director,

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Priscilla Sandoval, Program Analyst

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Demographic Statistics

Jo Ann Glakas Pappalardo, Senior Statistician

Alan Friedman, Health Statistician

Patient Care Statistics

Vacant

Copies of this and other statistical publications may be obtained from Division of Program Statistics at:

Indian Health Service

Office of Public Health Support

**Division of Program Statistics** 

801 Thompson Building

Suite 120

Rockville, Maryland 20852

Phone: 301-443-1180

Fax: 301-443-1770

DPS Website: http://www.ihs.gov/DPS/

# Tables and Charts

#### CHART 1—POPULATION BY AGE AND SEX, 2000 CENSUS WITH BRIDGED RACE CATEGORIES

Al/AN women comprise 51 percent of the IHS service population, as is true for U.S. all races and white women in the population groups. Al/AN women are considerably younger than women in the U.S. general population. According to the 2000 census, 24.4 percent of Al/AN women are younger than 25 years of age compared to 17.2 percent for the U.S. all races population and 16.4 percent for the U.S. white population. For Al/AN women, 3.2 percent are older than 64 years in contrast to 7.3 and 7.9 percent for the U.S. all races and white populations, respectively.

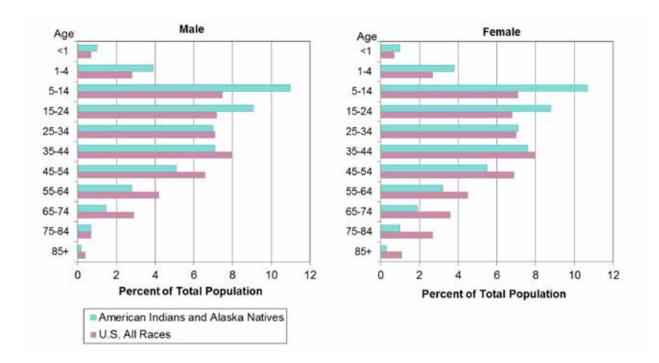




TABLE 1—AGE AND SEX PERCENT DISTRIBUTION

AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA,

AND U.S. ALL RACES AND WHITE POPULATIONS,

2000 CENSUS WITH BRIDGED RACE CATEGORIES

|           | American Indian<br>and Alaska<br>Native,<br>IHS Service Area <sup>1/</sup> |  | U.S. All | Races  | U.S. V | Vhite  |
|-----------|--|--|----------|--------|--------|--------|
| Age Group |  |  | Male     | Female | Male   | Female |

| Percent of Both Sexes: |        |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|
| All Ages               | 49.335 | 50.665 | 49.069 | 50.931 | 49.320 | 50.680 |
| Under 1 year           | 0.998  | 0.953  | 0.700  | 0.667  | 0.669  | 0.636  |
| 1-4 years              | 3.947  | 3.806  | 2.779  | 2.654  | 2.657  | 2.526  |
| 5-14 years             | 10.969 | 10.660 | 7.460  | 7.103  | 7.123  | 6.755  |
| 15-24 years            | 9.060  | 8.780  | 7.158  | 6.801  | 6.953  | 6.519  |
| 25-34 years            | 7.008  | 7.066  | 7.125  | 6.995  | 7.029  | 6.737  |
| 35-44 years            | 7.084  | 7.553  | 7.963  | 8.049  | 8.054  | 7.971  |
| 45-54 years            | 5.060  | 5.484  | 6.611  | 6.854  | 6.849  | 6.957  |
| 55-64 years            | 2.846  | 3.167  | 4.152  | 4.500  | 4.391  | 4.677  |
| 65-74 years            | 1.539  | 1.886  | 2.941  | 3.568  | 3.181  | 3.787  |
| 75-84 years            | 0.653  | 0.970  | 1.740  | 2.662  | 1.927  | 2.922  |
| 85 years and over      | 0.171  | 0.340  | 0.442  | 1.077  | 0.488  | 1.194  |

| Percent of Within Each Sex: |         |         |         |         |         |         |
|-----------------------------|---------|---------|---------|---------|---------|---------|
| All Ages                    | 100.000 | 100.000 | 100.000 | 100.000 | 100.000 | 100.000 |
| Under 1 year                | 2.024   | 1.880   | 1.426   | 1.309   | 1.356   | 1.254   |
| 1-4 years                   | 8.001   | 7.513   | 5.663   | 5.212   | 5.387   | 4.983   |
| 5-14 years                  | 22.233  | 21.040  | 15.203  | 13.947  | 14.443  | 13.329  |
| 15-24 years                 | 18.364  | 17.330  | 14.587  | 13.353  | 14.097  | 12.864  |
| 25-34 years                 | 14.204  | 13.946  | 14.520  | 13.735  | 14.251  | 13.292  |
| 35-44 years                 | 14.359  | 14.907  | 16.228  | 15.803  | 16.330  | 15.728  |
| 45-54 years                 | 10.256  | 10.824  | 13.473  | 13.457  | 13.888  | 13.728  |
| 55-64 years                 | 5.769   | 6.252   | 8.462   | 8.836   | 8.903   | 9.229   |
| 65-74 years                 | 3.120   | 3.723   | 5.994   | 7.006   | 6.449   | 7.473   |
| 75-84 years                 | 1.323   | 1.914   | 3.545   | 5.227   | 3.907   | 5.766   |
| 85 years and over           | 0.347   | 0.671   | 0.900   | 2.115   | 0.990   | 2.355   |

<sup>&</sup>lt;sup>11</sup>Counts may not sum exactly to 2000 Census with Bridged Race Categories totals found in other tables due to rounding of counts by age and sex for counties split between service units. This table should be used for population by age and sex only.

# CHART 2—EMPLOYMENT STATUS BY SEX, AMERICAN INDIANS AND ALASKA NATIVES (ALONE), AND U.S. ALL RACES, 2000 CENSUS

Al/AN women do not fare as well in the job market as women in the U.S. general population. According to the 2000 census, 11.7 percent of Al/AN women aged 16 and older were unemployed in contrast to 5.8 percent for the U.S. all races population.

#### Percent

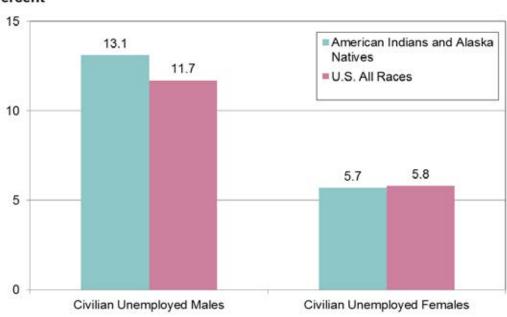




TABLE 2—SELECTED ECONOMIC PROFILES FOR THE UNITED STATES, 2000 CENSUS

|  | American<br>Indian and<br>Alaska Native<br>(alone) | All<br>Races | White<br>(alone) | Black<br>(alone) | Asian<br>(alone) | Native<br>Hawaiian and<br>Other Pacific<br>Islander<br>(alone) | Hispanic <sup>1/</sup><br>(alone) |
|--|--|--------------|------------------|------------------|------------------|--|-----------------------------------|
|  |  |              |                  |                  |                  |  |                                   |
| Educational Attainment (Perso            |  |              |                  |                  |                  |  |                                   |
| Percent less than 9th grade              | 11.1   | 7.5          | 5.9              | 7.9              | 10.7             | 7.5  | 27.8                              |
| Percent 9th to 12th grade,<br>no diploma | 18.0   | 12.1         | 10.5             | 19.8             | 8.9              | 14.2   | 19.8                              |
| Percent high school graduate or higher   | 70.9   | 80.4         | 83.6             | 72.3             | 80.4             | 78.2   | 52.4                              |
| Percent bachelor's degree or higher      | 11.5   | 24.4         | 26.1             | 14.3             | 44.1             | 13.8   | 10.4                              |
|  |  |              |                  |                  |                  |  |                                   |
| Civilian Employment Status by            | Sex (Persons 16 y                                  | ears and old | er):             |                  |                  |  |                                   |
| Percent unemployed, males                | 13.1   | 5.7          | 4.6              | 12.0             | 5.0              | 10.8   | 8.2                               |
| Percent unemployed, females              | 11.7   | 5.8          | 4.6              | 10.8             | 5.3              | 11.0   | 10.6                              |
|  |  |              |                  |                  |                  |  |                                   |
| Household Income in 1999:                |  |              |                  |                  |                  |  |                                   |
| Median household income                  | \$30,599   | \$41,994     | \$44,687         | \$29,423         | \$51,908         | \$42,717   | \$33,676                          |
|  |  |              |                  |                  |                  |  |                                   |
| Percent Below the Poverty Lev            |  |              |                  |                  | I                |  |                                   |
| All Ages                                 | 25.7   | 12.4         | 9.1              | 24.9             | 12.6             | 17.7   | 22.6                              |
| Under 5 years                            | 34.5   | 18.2         | 12.5             | 36.7             | 6.4              | 11.6   | 28.8                              |
| 5 years                                  | 33.6   | 17.6         | 12.0             | 35.2             | 1.5              | 2.4  | 28.5                              |
| 6 to 11 years                            | 31.7   | 16.9         | 11.3             | 33.5             | 9.5              | 14.5   | 28.2                              |
| 12 to 17 years                           | 29.0   | 14.8         | 10.0             | 29.4             | 9.9              | 12.8   | 26.2                              |
| 18 to 64 years                           | 22.6   | 11.1         | 8.6              | 20.7             | 65.1             | 55.5   | 19.9                              |
| 65 to 74 years                           | 21.9   | 8.5          | 6.7              | 21.4             | 4.4              | 2.1  | 18.4                              |
| 75 years and older                       | 26.3   | 11.5         | 10.0             | 26.6             | 3.1              | 1.0  | 21.8                              |

Data for Hispanic persons are not tabulated separately by race. Data shown for Hispanic persons include all persons of Hispanic origin of any race.

NOTE: Selected Population Groups: American Indian and Alaska Native (alone); White (alone), Black or African American (alone); Asian (alone); and Native Hawaiian and other Pacific Islander (alone); and Hispanic (alone)

and Hispanic (alone).

SOURCE: U.S. Bureau of the Census, Census 2000 Summary File 3

# CHART 3—LOW BIRTHWEIGHT (LESS THAN 2,500 GRAMS) AS A PERCENT OF TOTAL LIVE BIRTHS BY AGE OF MOTHER

Low birthweight occurs at lower rates among Al/AN women than it does for women in the U.S. all races and white populations. For Al/AN women, 7.1 percent of reported live births are of low birthweight, just below the level for the U.S. white population (7.2 percent). This compares to 8.2 percent for the U.S. all races population. Al/AN women experience their highest rate of low birthweight (10.2 percent) in the age group 40 years and older. For the U.S. all races and white populations, this occurs in the under 15 year old age group, the rates are 13.3 and 10.5 percent, respectively.

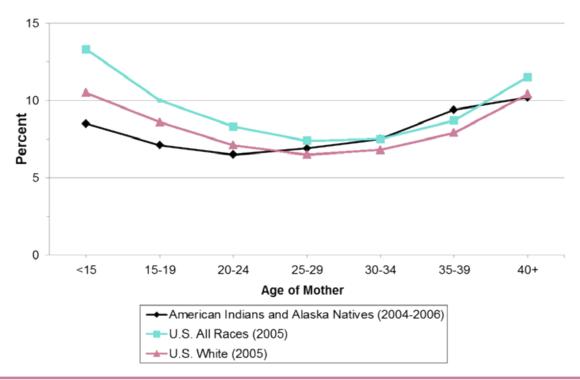




TABLE 3—LOW BIRTHWEIGHT (LESS THAN 2,500 GRAMS) BY AGE OF MOTHER AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006, **AND U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

**Total Live** 

| Age of Mother                     | DII UIS   | Low bil tilweight | bii tiiweigiit |  |  |  |  |
|-----------------------------------|-----------|-------------------|----------------|--|--|--|--|
|                                   |           |                   |                |  |  |  |  |
| American Indian and Alaska Native |           |                   |                |  |  |  |  |
| All Ages                          | 124,0911/ | 8,812             | 7.1            |  |  |  |  |
| Under 20 year                     | 21,768    | 1,543             | 7.1            |  |  |  |  |
| Under 15 years                    | 317       | 27                | 8.5            |  |  |  |  |
| 15-19 years                       | 21,451    | 1,516             | 7.1            |  |  |  |  |
| 20-24 years                       | 43,385    | 2,833             | 6.5            |  |  |  |  |
| 25-29 years                       | 31,118    | 2,138             | 6.9            |  |  |  |  |
| 30-34 years                       | 17,772    | 1,337             | 7.5            |  |  |  |  |
| 35-39 years                       | 7,970     | 750               | 9.4            |  |  |  |  |
| 40 years and over                 | 2,078     | 211               | 10.2           |  |  |  |  |

**Number of** 

**Percent Low** 

| U.S. All Races    |             |         |      |  |  |  |
|-------------------|-------------|---------|------|--|--|--|
| All Ages          | 4,134,370²/ | 338,565 | 8.2  |  |  |  |
| Under 20 year     | 420,807     | 42,417  | 10.1 |  |  |  |
| Under 15 years    | 6,706       | 892     | 13.3 |  |  |  |
| 15-19 years       | 414,101     | 41,525  | 10.0 |  |  |  |
| 20-24 years       | 1,039,405   | 86,321  | 8.3  |  |  |  |
| 25-29 years       | 1,130,540   | 83,247  | 7.4  |  |  |  |
| 30-34 years       | 949,820     | 71,707  | 7.5  |  |  |  |
| 35-39 years       | 482,716     | 42,140  | 8.7  |  |  |  |
| 40 years and over | 111,082     | 12,733  | 11.5 |  |  |  |

| U.S. White        |             |         |      |  |  |  |
|-------------------|-------------|---------|------|--|--|--|
| All Ages          | 3,226,6613/ | 230,966 | 7.2  |  |  |  |
| Under 20 year     | 298,627     | 25,695  | 8.6  |  |  |  |
| Under 15 years    | 3,640       | 381     | 10.5 |  |  |  |
| 15-19 years       | 294,987     | 25,314  | 8.6  |  |  |  |
| 20-24 years       | 789,836     | 55,744  | 7.1  |  |  |  |
| 25-29 years       | 898,697     | 58,043  | 6.5  |  |  |  |
| 30-34 years       | 762,759     | 51,755  | 6.8  |  |  |  |
| 35-39 years       | 388,973     | 30,593  | 7.9  |  |  |  |
| 40 years and over | 87,769      | 9,136   | 10.4 |  |  |  |

<sup>&</sup>lt;sup>1/</sup>Excludes 170 Al/AN live births with birthweight not stated. <sup>2/</sup>Excludes 3,979 U.S. all races live births with birthweight not stated.

<sup>&</sup>lt;sup>3</sup>/Excludes 2,633 U.S. white live births with birthweight not stated.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 4—HIGH BIRTHWEIGHT (4,000 GRAMS OR MORE) AS A PERCENT OF TOTAL LIVE BIRTHS BY AGE OF MOTHER

High birthweight (4,000 grams or more) are a relatively greater problem for Al/AN women than low birthweight. High birthweight may be a complication of diabetic pregnancies and should be of concern. For Al/AN women, 10.5 percent of all babies in the IHS service area were high birthweight compared to 7.1 percent for low birthweight. The U.S. all races population has a lower rate of high birthweight, i.e., 8.1 percent, whereas the U S. white population has a higher rate, 9.0. The highest rates for all three population groups occur in age group 35-39 years.

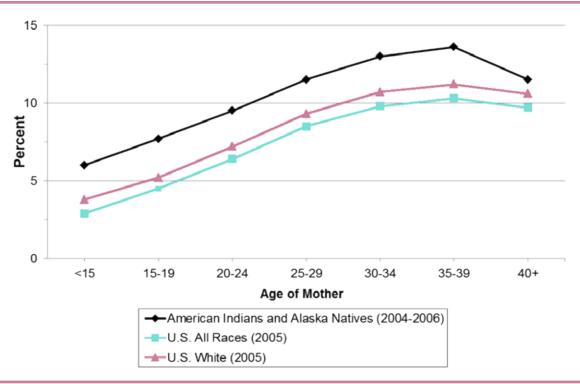




TABLE 4—HIGH BIRTHWEIGHT (4,000 GRAMS OR MORE) BY AGE OF MOTHER AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006, **AND U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|               | Total  | Number      | Percent     |
|---------------|--------|-------------|-------------|
|               | Live   | of High     | High        |
| Age of Mother | Births | Birthweight | Birthweight |

| American Indian and Alaska Native |           |        |      |  |  |  |
|-----------------------------------|-----------|--------|------|--|--|--|
| All Ages                          | 124,0911/ | 12,991 | 10.5 |  |  |  |
| Under 20 year                     | 21,768    | 1,669  | 7.7  |  |  |  |
| Under 15 years                    | 317       | 19     | 6.0  |  |  |  |
| 15-19 years                       | 21,451    | 1,650  | 7.7  |  |  |  |
| 20-24 years                       | 43,385    | 4,109  | 9.5  |  |  |  |
| 25-29 years                       | 31,118    | 3,572  | 11.5 |  |  |  |
| 30-34 years                       | 17,772    | 2,318  | 13.0 |  |  |  |
| 35-39 years                       | 7,970     | 1,085  | 13.6 |  |  |  |
| 40 years and over                 | 2,078     | 238    | 11.5 |  |  |  |

|                   | U.S. All Races |         |      |  |  |  |  |  |  |  |
|-------------------|----------------|---------|------|--|--|--|--|--|--|--|
| All Ages          | 4,134,370²/    | 335,932 | 8.1  |  |  |  |  |  |  |  |
| Under 20 year     | 420,807        | 19,001  | 4.5  |  |  |  |  |  |  |  |
| Under 15 years    | 6,706          | 194     | 2.9  |  |  |  |  |  |  |  |
| 15-19 years       | 414,101        | 18,807  | 4.5  |  |  |  |  |  |  |  |
| 20-24 years       | 1,039,405      | 66,926  | 6.4  |  |  |  |  |  |  |  |
| 25-29 years       | 1,130,540      | 96,259  | 8.5  |  |  |  |  |  |  |  |
| 30-34 years       | 949,820        | 93,203  | 9.8  |  |  |  |  |  |  |  |
| 35-39 years       | 482,716        | 49,762  | 10.3 |  |  |  |  |  |  |  |
| 40 years and over | 111,082        | 10,781  | 9.7  |  |  |  |  |  |  |  |

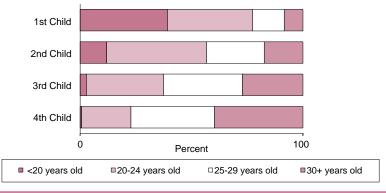
|                   | U.S. White  |         |      |  |  |  |  |  |  |  |
|-------------------|-------------|---------|------|--|--|--|--|--|--|--|
| All Ages          | 3,226,6613/ | 290,682 | 9.0  |  |  |  |  |  |  |  |
| Under 20 year     | 298,627     | 15,427  | 5.2  |  |  |  |  |  |  |  |
| Under 15 years    | 3,640       | 137     | 3.8  |  |  |  |  |  |  |  |
| 15-19 years       | 294,987     | 15,290  | 5.2  |  |  |  |  |  |  |  |
| 20-24 years       | 789,836     | 56,725  | 7.2  |  |  |  |  |  |  |  |
| 25-29 years       | 898,697     | 83,842  | 9.3  |  |  |  |  |  |  |  |
| 30-34 years       | 762,759     | 81,895  | 10.7 |  |  |  |  |  |  |  |
| 35-39 years       | 388,973     | 43,483  | 11.2 |  |  |  |  |  |  |  |
| 40 years and over | 87,769      | 9,310   | 10.6 |  |  |  |  |  |  |  |

<sup>&</sup>lt;sup>1/</sup>Excludes 170 Al/AN live births with birthweight not stated.
<sup>2/</sup>Excludes 3,979 U.S. all races live births with birthweight not stated.
<sup>3/</sup>Excludes 2,633 U.S. white live births with birthweight not stated.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

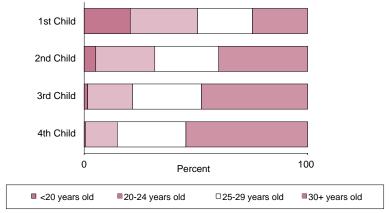
# CHART 5.1—BIRTH ORDER BY AGE OF MOTHER, PERCENT WITHIN BIRTH ORDER, AMERICAN INDIANS AND ALASKA NATIVES

Al/AN women on average give birth to children at younger ages than women in the U.S. general population. For Al/AN women, 39.1 percent are less than 20 years; 77.4 percent are less than 25 years; whereas, 2.6 percent are 35 years or older at the time of their first born.



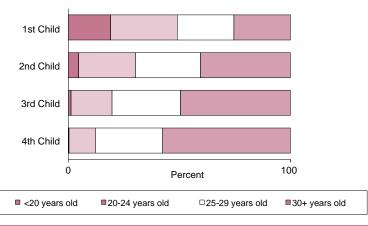
#### CHART 5.2—BIRTH ORDER BY AGE OF MOTHER, PERCENT WITHIN BIRTH ORDER, U.S. ALL RACES

Women in the U.S. all races population tends to wait longer for their first child than Al/AN women. For the U.S. all races population, 20.6 percent of women are less than 20 years; 50.7 percent are less than 25 years; whereas, 8.3 percent are 35 years or older when they deliver their first child.



#### CHART 5.3—BIRTH ORDER BY AGE OF MOTHER, PERCENT WITHIN BIRTH ORDER, U.S. WHITE

The U.S. white population is similar to the U.S. general population in terms of mother's age at birth of first child. For the white population, 19.0 percent of women are less than 20 years; 49.1 percent are less than 25 years; whereas, 8.5 percent are 35 years or older when they deliver their first child.



**TABLE 5—NUMBER AND PERCENT DISTRIBUTION OF LIVE BIRTHS** BY AGE OF MOTHER WITHIN BIRTH ORDER AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006, **AND U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

| Age To | Total Live | Live Birth Order |              |              |              |              |               |  |  |
|--------|------------|------------------|--------------|--------------|--------------|--------------|---------------|--|--|
| Group  | Births     | 1st<br>Child     | 2nd<br>Child | 3rd<br>Child | 4th<br>Child | 5th<br>Child | 6th+<br>Child |  |  |

|               | American Indian and Alaska Native, IHS Service Area |        |        |        |        |       |       |  |  |  |  |
|---------------|---|--------|--------|--------|--------|-------|-------|--|--|--|--|
| All Ages      | 124,0911/   | 43,276 | 33,942 | 22,539 | 12,053 | 6,004 | 5,554 |  |  |  |  |
| All Ages      | 100.0   | 100.0  | 100.0  | 100.0  | 100.0  | 100.0 | 100.0 |  |  |  |  |
| Under 20 year | 17.5  | 39.1   | 11.9   | 2.8    | 0.6    | 0.1   | 3.3   |  |  |  |  |
| 20-24 years   | 35.0  | 38.3   | 44.8   | 34.7   | 22.2   | 11.6  | 23.7  |  |  |  |  |
| 25-29 years   | 25.1  | 14.2   | 25.9   | 35.3   | 37.5   | 36.2  | 34.9  |  |  |  |  |
| 30-34 years   | 14.3  | 5.7    | 12.0   | 18.4   | 25.6   | 32.4  | 27.2  |  |  |  |  |
| 35-39 years   | 6.4   | 2.2    | 4.5    | 7.2    | 11.2   | 15.6  | 10.3  |  |  |  |  |
| 40-44 years   | 1.6   | 0.4    | 0.9    | 1.6    | 2.7    | 3.9   | 0.6   |  |  |  |  |
| 45-54 years   | 0.1   | 0.0    | 0.0    | 0.1    | 0.1    | 0.1   | 0.0   |  |  |  |  |

|               | U.S. All Races |           |           |         |         |         |        |  |  |  |  |
|---------------|----------------|-----------|-----------|---------|---------|---------|--------|--|--|--|--|
| All Ages      | 4,138,3492/    | 1,637,953 | 1,326,598 | 699,661 | 278,310 | 101,738 | 76,596 |  |  |  |  |
| All Ages      | 100.0          | 100.0     | 100.0     | 100.0   | 100.0   | 100.0   | 100.0  |  |  |  |  |
| Under 20 year | 10.2           | 20.6      | 5.2       | 1.5     | 0.5     | 0.2     | 0.0    |  |  |  |  |
| 20-24 years   | 25.1           | 30.1      | 26.4      | 20.2    | 14.3    | 9.5     | 3.6    |  |  |  |  |
| 25-29 years   | 27.4           | 24.6      | 28.6      | 30.7    | 30.7    | 29.1    | 19.7   |  |  |  |  |
| 30-34 years   | 23.0           | 16.5      | 25.4      | 28.4    | 30.5    | 31.9    | 32.2   |  |  |  |  |
| 35-39 years   | 11.7           | 6.8       | 12.0      | 15.9    | 19.2    | 22.3    | 30.1   |  |  |  |  |
| 40-44 years   | 2.5            | 1.4       | 2.2       | 3.1     | 4.7     | 6.7     | 13.2   |  |  |  |  |
| 45-54 years   | 0.2            | 0.1       | 0.1       | 0.2     | 0.3     | 0.5     | 1.2    |  |  |  |  |

| U.S. White    |             |           |           |         |         |        |        |  |  |  |
|---------------|-------------|-----------|-----------|---------|---------|--------|--------|--|--|--|
| All Ages      | 3,229,2943/ | 1,274,542 | 1,052,133 | 552,735 | 212,533 | 73,420 | 52,141 |  |  |  |
| All Ages      | 100.0       | 100.0     | 100.0     | 100.0   | 100.0   | 100.0  | 100.0  |  |  |  |
| Under 20 year | 9.3         | 19.0      | 4.6       | 1.2     | 0.3     | 0.1    | 0.0    |  |  |  |
| 20-24 years   | 24.5        | 30.1      | 25.6      | 18.5    | 12.1    | 7.5    | 2.6    |  |  |  |
| 25-29 years   | 27.9        | 25.5      | 29.3      | 30.8    | 29.9    | 26.9   | 16.3   |  |  |  |
| 30-34 years   | 23.6        | 16.9      | 26.0      | 29.6    | 32.0    | 33.2   | 31.9   |  |  |  |
| 35-39 years   | 12.0        | 7.0       | 12.2      | 16.6    | 20.6    | 24.6   | 32.8   |  |  |  |
| 40-44 years   | 2.6         | 1.4       | 2.2       | 3.1     | 4.8     | 7.2    | 14.9   |  |  |  |
| 45-54 years   | 0.2         | 0.1       | 0.1       | 0.2     | 0.3     | 0.5    | 1.4    |  |  |  |

<sup>0.0</sup> Quantity more than zero but less than 0.05.

<sup>&</sup>lt;sup>11</sup>Excludes 733 Al/AN live births with birth order not reported.
<sup>22</sup>Excludes 17,493 U.S. all races births with birth order not reported.
<sup>32</sup>Excludes 11,790 U.S. white births with birth order not reported.

NOTE: Percents may not sum to 100.0 due to rounding.

SOURCE: Rates for U.S. All Races and U.S. White: Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2005. National vital statistics reports; vol 56 no 6.

Hyattsville, MD: National Center for Health Statistics. 2007.

#### **CHART 6—PRENATAL CARE IN FIRST TRIMESTER, CALENDAR YEARS 2004-2006**

Al/AN women generally begin prenatal care later than women in the U.S. all races population. Prenatal care began in the first trimester at 66.6 percent of Al/AN live births, whereas, this percentage for the U.S. general population is 56.5. The Portland Area has the lowest percent (56.8) of mothers who received prenatal care in the first trimester, whereas, the California Area has the highest percent (74.8).

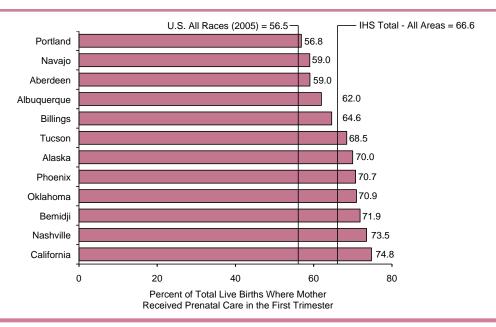


TABLE 6—PRENATAL CARE IN FIRST TRIMESTER, CALENDAR YEARS 2004-2006

|                       | Total<br>Live        | e Prenatal Care |           | Received Prenatal<br>he First Trimester <sup>2/</sup> |
|-----------------------|----------------------|-----------------|-----------|---|
|                       | Births <sup>1/</sup> | Reported        | Number    | Percent   |
|                       |                      |                 |           |   |
| U.S. All Races (2005) | 4,138,349            | 2,760,324       | 2,338,438 | 56.5  |
|                       |                      |                 |           |   |
| All IHS Areas         | 124,091              | 118,187         | 82,649    | 66.6  |
|                       |                      |                 |           |   |
| Aberdeen              | 10,143               | 9,792           | 5,988     | 59.0  |
| Alaska                | 9,040                | 8,648           | 6,325     | 70.0  |
| Albuquerque           | 6,426                | 5,925           | 3,982     | 62.0  |
| Bemidji               | 8,286                | 8,076           | 5,954     | 71.9  |
| Billings              | 5,435                | 5,236           | 3,511     | 64.6  |
| California            | 8,236                | 7,949           | 6,158     | 74.8  |
| Nashville             | 6,817                | 6,620           | 5,011     | 73.5  |
| Navajo                | 14,460               | 13,897          | 8,531     | 59.0  |
| Oklahoma              | 25,062               | 24,201          | 17,778    | 70.9  |
| Phoenix               | 14,312               | 13,679          | 10,119    | 70.7  |
| Portland              | 13,557               | 11,921          | 7,706     | 56.8  |
| Tucson                | 2,317                | 2,243           | 1,586     | 68.5  |

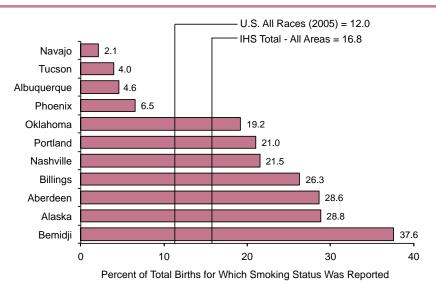
 $<sup>^{1}</sup>$ Includes 1,378,025 U.S. All Races live births and 5,904 American Indian/Alaska Native live births for which

prenatal care was either 'not reported' or 'no prenatal care was provided'.

<sup>&</sup>lt;sup>2/</sup>Percent based on live births with this information reported.

### CHART 7.1—PERCENT OF LIVE BIRTHS FOR MOTHERS WHO SMOKED DURING PREGNANCY, CALENDAR YEARS 2004-2006

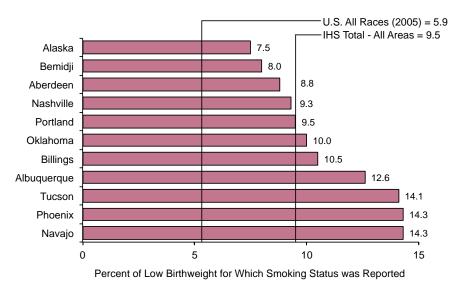
In the Al/AN population, 16.8 percent of women report that they smoked tobacco during pregnancy. Women in the U.S. all races population smoked at a lower percent during pregnancy, i.e., 12.0 percent. There is an established relationship between smoking during pregnancy and low birthweight births.



NOTE: California data was excluded.

# CHART 7.2—PERCENT OF LOW BIRTHWEIGHT FOR MOTHERS WHO SMOKED DURING PREGNANCY, CALENDAR YEARS 2004-2006

The percent of Al/AN women who smoked during pregnancy and delivered babies of low birthweight was 9.5 for all Al/AN women in the Indian Health Service for years 2004-2006. This compared to 5.9 percent of the women of U.S. all races who smoked during pregnancy and delivered babies who weighed less than 2,500 grams.



NOTE: California data was excluded.

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#### TABLE 7—PERCENT OF MOTHERS WHO SMOKED DURING PREGNANCY FOR ALL BIRTHS AND LOW BIRTHWEIGHT BY AGE OF MOTHER, CALENDAR YEARS 2004-2006

(Low birthweight is defined as weight less than 2,500 grams (5lb., 8oz.))

|                       | for \       | Percent of Live Births <sup>11</sup><br>for Which the Mother Reported Smoking |                |                |                |  |  |  |  |  |
|-----------------------|-------------|---|----------------|----------------|----------------|--|--|--|--|--|
|                       | All<br>Ages | Under 15<br>Years   | 15-19<br>Years | 20-34<br>Years | 35-54<br>Years |  |  |  |  |  |
|                       |             |   |                |                |                |  |  |  |  |  |
| U.S. All Races (2005) | 12.0        | 5.1   | 18.0           | 12.3           | 6.7            |  |  |  |  |  |
| All IHS Areas         | 16.8        | 8.5   | 17.2           | 17.0           | 13.5           |  |  |  |  |  |
|                       |             |   | ı              |                |                |  |  |  |  |  |
| Aberdeen              | 28.6        | 17.6  | 25.4           | 29.6           | 27.3           |  |  |  |  |  |
| Alaska                | 28.8        | 10.5  | 30.4           | 29.2           | 22.8           |  |  |  |  |  |
| Albuquerque           | 4.6         | 6.7*  | 5.3            | 4.7            | 1.9            |  |  |  |  |  |
| Bemidji               | 37.6        | 19.0  | 38.9           | 38.1           | 29.9           |  |  |  |  |  |
| Billings              | 26.3        | 12.5  | 25.3           | 26.8           | 25.4           |  |  |  |  |  |
| California            | *           | *   | *              | *              | *              |  |  |  |  |  |
| Nashville             | 21.5        | 0.0*  | 22.1           | 21.7           | 19.1           |  |  |  |  |  |
| Navajo                | 2.1         | 0.0*  | 2.7            | 2.1            | 1.4            |  |  |  |  |  |
| Oklahoma              | 19.2        | 5.6   | 19.2           | 19.2           | 19.6           |  |  |  |  |  |
| Phoenix               | 6.5         | 0.0*  | 5.3            | 6.8            | 6.8            |  |  |  |  |  |
| Portland              | 21.0        | 25.0  | 23.3           | 21.0           | 17.2           |  |  |  |  |  |
| Tucson                | 4.0         | 0.0*  | 4.2            | 3.7            | 5.7            |  |  |  |  |  |

|                       | for \       | Percent of Low Birthweight <sup>1/</sup><br>for Which the Mother Reported Smoking |                |      |      |  |  |  |  |  |  |
|-----------------------|-------------|---|----------------|------|------|--|--|--|--|--|--|
|                       | All<br>Ages | Under 15<br>Years   | 15-19<br>Years |      |      |  |  |  |  |  |  |
|                       |             |   |                |      |      |  |  |  |  |  |  |
| U.S. All Races (2005) | 5.9         | 2.6   | 8.2            | 6.1  | 3.4  |  |  |  |  |  |  |
|                       |             |   |                |      |      |  |  |  |  |  |  |
| All IHS Areas         | 9.5         | 0.0   | 8.1            | 9.2  | 15.7 |  |  |  |  |  |  |
|                       |             |   |                |      |      |  |  |  |  |  |  |
| Aberdeen              | 8.8         | 0.0*  | 6.2            | 9.2  | 12.4 |  |  |  |  |  |  |
| Alaska                | 7.5         | 0.0*  | 5.3            | 7.8  | 9.5  |  |  |  |  |  |  |
| Albuquerque           | 12.6        | 0.0*  | 8.9            | 13.3 | 18.2 |  |  |  |  |  |  |
| Bemidji               | 8.0         | 0.0*  | 5.8            | 8.0  | 15.5 |  |  |  |  |  |  |
| Billings              | 10.5        | 0.0*  | 8.0            | 10.9 | 14.5 |  |  |  |  |  |  |
| California            | *           | *   | *              | *    | *    |  |  |  |  |  |  |
| Nashville             | 9.3         | 0.0*  | 12.5           | 8.7  | 8.6  |  |  |  |  |  |  |
| Navajo                | 14.3        | 0.0*  | 15.2           | 13.3 | 21.7 |  |  |  |  |  |  |
| Oklahoma              | 10.0        | 33.3  | 9.2            | 9.4  | 20.6 |  |  |  |  |  |  |
| Phoenix               | 14.3        | 0.0*  | 11.8           | 13.9 | 21.3 |  |  |  |  |  |  |
| Portland              | 9.5         | 0.0*  | 9.1            | 8.7  | 19.2 |  |  |  |  |  |  |
| Tucson                | 14.1        | 0.0*  | 15.8           | 11.3 | 27.3 |  |  |  |  |  |  |

<sup>--</sup> Represents zero.

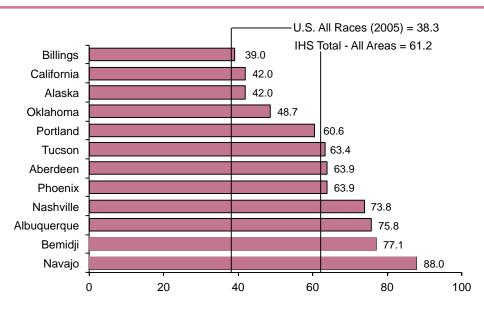
\* Figure does not meet standards of reliability or precision.

1/Based on the number of live births with smoking status of the mother reported.

2/Excludes data for California, which did not require reporting of tobacco use during pregnancy.

#### **CHART 8—BIRTH RATES AMONG MOTHERS WITH DIABETES, CALENDAR YEARS 2004-2006**

Mothers of Al/AN newborns were more likely to be have diabetes (medical risk factor of diabetes is reported on the birth certificate) than their counterparts in the U.S. all races population. For the Al/AN population, there were 61.2 births to mothers with diabetes per 1,000 of all live births. This is 1.6 times larger than the U.S. all races rate of 38.3. The Navajo Area rate (88.0) is 2.3 times the U.S. all races rate. There are no IHS service areas below the U.S. all races rate of 38.3.



Rate per 1,000 Live Births With Diabetes Status of the Mother Reported

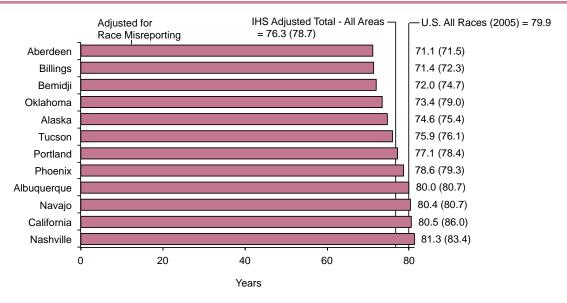
TABLE 8—RATE<sup>11</sup> OF LIVE BIRTHS AMONG MOTHERS WITH DIABETES BY AGE OF MOTHER, CALENDAR YEAR 2004-2006

|                       | All<br>Ages | Under<br>20 Years | 20-24<br>Years | 25-29<br>Years | 30-34<br><b>Y</b> ears | 35-39<br>Years | 40-54<br>Years |
|-----------------------|-------------|-------------------|----------------|----------------|------------------------|----------------|----------------|
| U.S. All Races (2005) | 38.3        | 11.9              | 21.9           | 36.1           | 50.7                   | 66.8           | 86.6           |
| All IHS Areas         | 61.2        | 18.8              | 35.2           | 68.1           | 108.9                  | 151.8          | 188.2          |
| Aberdeen              | 63.9        | 16.3              | 37.2           | 75.2           | 140.3                  | 178.2          | 330.5          |
| Alaska                | 42.0        | 12.6              | 20.4           | 50.3           | 71.5                   | 95.9           | 128.9          |
| Albuquerque           | 75.8        | 19.6              | 44.0           | 78.0           | 131.1                  | 191.2          | 205.3          |
| Bemidji               | 77.1        | 28.4              | 47.6           | 89.5           | 137.8                  | 190.5          | 239.6          |
| Billings              | 39.0        | 8.4               | 22.3           | 45.1           | 87.0                   | 134.3          | 101.7          |
| California            | 42.0        | 16.3              | 25.1           | 49.3           | 61.8                   | 76.0           | 130.2          |
| Nashville             | 73.8        | 31.5              | 51.1           | 86.7           | 104.2                  | 135.2          | 153.8          |
| Navajo                | 88.0        | 17.9              | 37.7           | 91.6           | 151.6                  | 228.6          | 239.8          |
| Oklahoma              | 48.7        | 18.2              | 32.5           | 58.7           | 87.9                   | 108.8          | 172.7          |
| Phoenix               | 63.9        | 19.1              | 40.0           | 69.4           | 112.8                  | 153.5          | 169.6          |
| Portland              | 60.6        | 21.3              | 34.4           | 58.6           | 104.4                  | 149.2          | 167.4          |
| Tucson                | 63.4        | 17.2              | 25.0           | 79.4           | 129.5                  | 175.3          | 128.2          |

<sup>1/</sup>Number of live births among mothers with diabetes per 1,000 live births with diabetes status reported in age group specified.

#### **CHART 9—LIFE EXPECTANCY AT BIRTH, FEMALES, CALENDAR YEARS 2004-2006**

The life expectancy for Al/AN females is 6.4 years greater than it is for Al/AN males, i.e., 76.3 compared to 69.9. Al/AN females are within 3.6 years of the life expectancy of U.S. all races females, which is 79.9. The Aberdeen Area has the lowest female life expectancy (71.1) among the IHS Areas. These Al/AN life expectancies have been adjusted to compensate for misreporting of Al/AN race on state death certificates.



NOTE: Life expectancies <u>not</u> adjusted for misreporting of American Indian/Alaska Native race on state death certificates are shown in parentheses.

#### CHART 10—DEATHS BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN females die at relatively older ages than Al/AN males. The percentage of deaths pertaining to ages under 45 is 21.2 percent for Al/AN females and 29.7 percent for males. However, for ages over 64, the female percentage is 52.3 compared to the male percentage of 39.3. These Al/AN counts have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

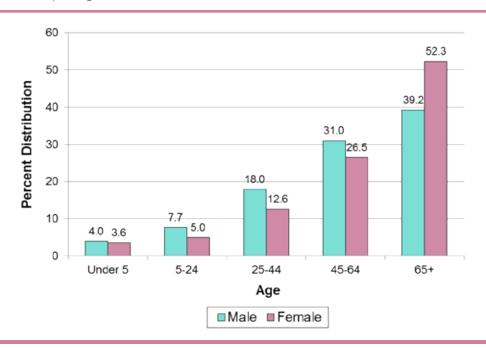


TABLE 10—NUMBER AND PERCENT DISTRIBUTION OF DEATHS BY AGE AND SEX AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006, **AND U.S. POPULATIONS, 2005** 

|                | American Ir | ndian / Alasl          | can Native - E | Both Sexes | America    | American Indian / Alaskan Native - Male |            |            |  |  |
|----------------|-------------|------------------------|----------------|------------|------------|---|------------|------------|--|--|
|                | Num         | ber                    | Perc           | ent        | Num        | ber                                     | Percent    |            |  |  |
| Age Group      | Unadjusted  | Adjusted <sup>1/</sup> | Unadjusted     | Adjusted1/ | Unadjusted | Adjusted <sup>1/</sup>                  | Unadjusted | Adjusted1/ |  |  |
|                | ı           | ı                      | I              | ı          |            |   |            |            |  |  |
| All Ages       | 30,213      | 35,038                 | 100.0          | 100.0      | 16,556     | 19,137                                  | 100.0      | 100.0      |  |  |
|                | ı           | ı                      |                | ı          |            |   |            |            |  |  |
| Under 1        | 871         | 1,019                  | 2.9            | 2.9        | 524        | 597                                     | 3.2        | 3.1        |  |  |
| 1 to 4         | 234         | 325                    | 0.8            | 0.9        | 128        | 180                                     | 0.8        | 0.9        |  |  |
| 5 to 14        | 270         | 327                    | 0.9            | 0.9        | 151        | 179                                     | 0.9        | 0.9        |  |  |
| 15 to 24       | 1,583       | 1,956                  | 5.2            | 5.6        | 1,101      | 1,300                                   | 6.7        | 6.8        |  |  |
| 25 to 34       | 1,703       | 2,156                  | 5.6            | 6.2        | 1,178      | 1,419                                   | 7.1        | 7.4        |  |  |
| 35 to 44       | 2,843       | 3,301                  | 9.4            | 9.4        | 1,780      | 2,026                                   | 10.8       | 10.6       |  |  |
| 45 to 54       | 4,099       | 4,644                  | 13.6           | 13.3       | 2,492      | 2,785                                   | 15.1       | 14.6       |  |  |
| 55 to 64       | 4,718       | 5,477                  | 15.6           | 15.6       | 2,723      | 3,131                                   | 16.4       | 16.4       |  |  |
| 65 to 74       | 5,261       | 6,190                  | 17.4           | 17.7       | 2,761      | 3,258                                   | 16.7       | 17.0       |  |  |
| 75 to 84       | 5,104       | 5,949                  | 16.9           | 17.0       | 2,418      | 2,870                                   | 14.6       | 15.0       |  |  |
| 85 and over    | 3,514       | 3,681                  | 11.6           | 10.5       | 1,291      | 1,383                                   | 7.8        | 7.2        |  |  |
| Age Not Stated | 13          | 13                     | 0.0            | 0.0        | 9          | 9                                       | 0.1        | 0.1        |  |  |

|                | American Indian / Alaskan Native - Female |              |            |            |                                      |                      |           |         |
|----------------|---|--------------|------------|------------|--------------------------------------|----------------------|-----------|---------|
|                | Num                                       | mber Percent |            |            |                                      | <b>United States</b> |           |         |
| Age Group      | Unadjusted                                | Adjusted1/   | Unadjusted | Adjusted1/ |                                      | All Races            | White     | Black   |
|                |   |              |            |            | Number<br>of Deaths,<br>All Ages     | 2,448,017            | 2,098,097 | 292,808 |
| All Ages       | 13,657                                    | 15,901       | 100.0      | 100.0      | Percent<br>Distribution,<br>All Ages | 100.0                | 100.0     | 100.0   |
|                |   |              |            |            |                                      |                      |           |         |
| Under 1        | 347                                       | 422          | 2.5        | 2.7        |                                      | 1.2                  | 0.9       | 3.0     |
| 1 to 4         | 106                                       | 145          | 0.8        | 0.9        |                                      | 0.2                  | 0.2       | 0.4     |
| 5 to 14        | 119                                       | 148          | 0.9        | 0.9        |                                      | 0.3                  | 0.2       | 0.5     |
| 15 to 24       | 482                                       | 656          | 3.5        | 4.1        |                                      | 1.4                  | 1.2       | 2.5     |
| 25 to 34       | 525                                       | 737          | 3.8        | 4.6        |                                      | 1.7                  | 1.4       | 3.4     |
| 35 to 44       | 1,063                                     | 1,275        | 7.8        | 8.0        |                                      | 3.5                  | 3.1       | 6.2     |
| 45 to 54       | 1,607                                     | 1,859        | 11.8       | 11.7       |                                      | 7.5                  | 6.7       | 12.9    |
| 55 to 64       | 1,995                                     | 2,346        | 14.6       | 14.8       |                                      | 11.2                 | 10.6      | 15.5    |
| 65 to 74       | 2,500                                     | 2,932        | 18.3       | 18.4       |                                      | 16.3                 | 16.0      | 17.7    |
| 75 to 84       | 2,686                                     | 3,079        | 19.7       | 19.4       |                                      | 28.0                 | 29.1      | 21.2    |
| 85 and over    | 2,223                                     | 2,298        | 16.3       | 14.5       |                                      | 28.7                 | 30.6      | 16.7    |
| Age Not Stated | 4   | 4            | 0.0        | 0.0        |                                      | 0.0                  | 0.0       | 0.0     |

#### **CHART 11—DEATH RATES, LEADING CAUSES: FEMALES**

The two leading causes of death for Al/AN females are malignant neoplasms and diseases of the heart. The same is true for U.S. all races and white females. Unintentional injuries, diabetes mellitus, and chronic liver diseases and cirrhosis are among the top five leading causes for Al/AN females. These Al/AN counts have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

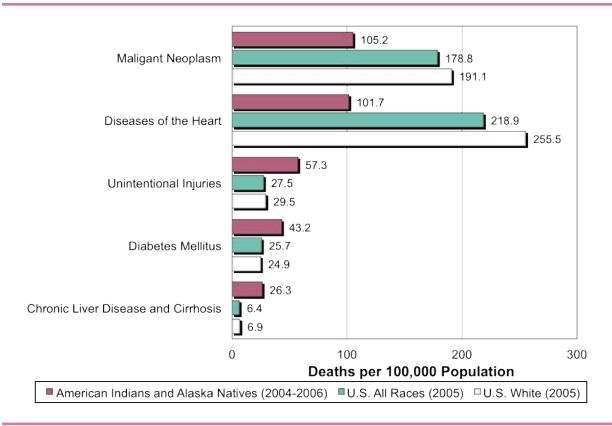




TABLE 11—LEADING CAUSES OF DEATH BY FEMALE
AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006
U.S. ALL RACES AND WHITE POPULATIONS, 2005

(Death rates per 100,000 Population)

|  | American<br>Indian and<br>Alaska Native | U.S. All Races | U.S. White | Ratio of American Indian<br>and Alaska Native¹′ to: |            |
|--|---|----------------|------------|---|------------|
| Cause of Death   | Adjusted Rate <sup>1/</sup>             | Rate           | Rate       | U.S. All Races                                      | U.S. White |
| All Causes   | 579.8                                   | 824.6          | 882.6      | 0.7   | 0.7        |
|  |   |                |            |   |            |
| Malignant neoplasms  | 105.2                                   | 178.8          | 191.1      | 0.6   | 0.6        |
| Diseases of the heart  | 101.7                                   | 218.9          | 255.5      | 0.5   | 0.4        |
| Unintentional injuries                                       | 57.3                                    | 27.5           | 29.5       | 2.1   | 1.9        |
| Motor vehicle  | 32.4                                    | 9.1            | 9.5        | 3.6   | 3.4        |
| Other unintentional injuries                                 | 24.9                                    | 18.4           | 20.0       | 1.4   | 1.2        |
| Diabetes mellitus  | 43.2                                    | 25.7           | 24.9       | 1.7   | 1.7        |
| Chronic liver disease and cirrhosis                          | 26.3                                    | 6.4            | 6.9        | 4.1   | 3.8        |
| Cerebrovascular diseases                                     | 29.0                                    | 57.8           | 61.6       | 0.5   | 0.5        |
| Pneumonia and influenza                                      | 13.9                                    | 23.2           | 25.7       | 0.6   | 0.5        |
| Chronic obstructive pulmonary diseases and allied conditions | 22.6                                    | 45.5           | 52.8       | 0.5   | 0.4        |
| Nephritis, nephrotic syndrome, and nephrosis                 | 13.8                                    | 15.0           | 14.6       | 0.9   | 0.9        |
| Suicide  | 9.4                                     | 4.5            | 5.0        | 2.1   | 1.9        |

 $<sup>^{1/}\!</sup>$ Adjusted to compensate for misreporting of Al/AN race on state death certificates.

# CHART 12—ALCOHOL-RELATED DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Although alcohol abuse is a more serious problem for Al/AN males than females, it still takes a considerable death toll among Al/AN females. The Al/AN female alcohol-related death rate for age groups 35 through 74 ranges from 35.0 to 66.1 deaths per 100,000 population. For U.S. all races and white females, the highest age-specific rates are 8.8 and 9.0, respectively, for age group 45 to 54 years. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

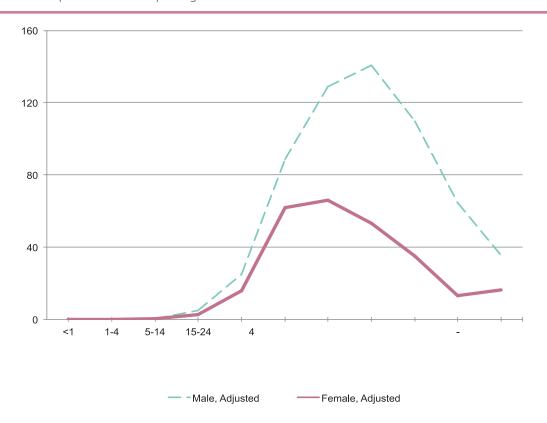




TABLE 12—ALCOHOL-RELATED DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

(Rate per 100,000 Population)

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|
| Age Group    | Both Sexes                        |                        | Male       |                        | Female     |                        |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |
|              |                                   |                        |            |                        |            |                        |  |
| Under 1 year | *                                 | *                      | *          | *                      | *          | *                      |  |
| 1-4 years    | *                                 | *                      | *          | *                      | *          | *                      |  |
| 5-14 years   | 0.4                               | 0.4                    | 0.6        | 0.6                    | 0.2        | 0.2                    |  |
| 15-24 years  | 3.2                               | 3.5                    | 4.5        | 5.1                    | 2.1        | 2.5                    |  |
| 25-34 years  | 17.5                              | 20.0                   | 23.4       | 24.9                   | 12.4       | 15.9                   |  |
| 35-44 years  | 62.8                              | 75.0                   | 75.0       | 88.9                   | 51.4       | 61.9                   |  |
| 45-54 years  | 82.8                              | 95.7                   | 112.3      | 128.9                  | 56.6       | 66.1                   |  |
| 55-64 years  | 82.8                              | 94.5                   | 123.0      | 140.7                  | 47.2       | 53.4                   |  |
| 65-74 years  | 62.5                              | 68.5                   | 98.5       | 109.8                  | 33.3       | 35.0                   |  |
| 75-84 years  | 32.0                              | 34.8                   | 58.0       | 64.7                   | 13.0       | 13.0                   |  |
| 85 years +   | 22.4                              | 22.4                   | 35.3       | 35.3                   | 16.4       | 16.4                   |  |

| A cro Cuoun  | U.S. All Races |      |        | U.S. White |      |        |
|--------------|----------------|------|--------|------------|------|--------|
| Age Group    | Both Sexes     | Male | Female | Both Sexes | Male | Female |
|              |                |      |        |            |      |        |
| Under 1 year | *              | *    | *      | *          | *    | *      |
| 1-4 years    | *              | *    | *      | *          | *    | *      |
| 5-14 years   | 0.0            | 0.0  | 0.0    | 0.0        | 0.0  | *      |
| 15-24 years  | 0.4            | 0.6  | 0.1    | 0.4        | 0.6  | 0.1    |
| 25-34 years  | 1.4            | 2.1  | 0.7    | 1.4        | 2.1  | 0.7    |
| 35-44 years  | 7.5            | 10.8 | 4.3    | 7.9        | 11.3 | 4.4    |
| 45-54 years  | 17.6           | 26.7 | 8.8    | 18.0       | 27.2 | 9.0    |
| 55-64 years  | 19.4           | 31.2 | 8.3    | 19.6       | 31.5 | 8.3    |
| 65-74 years  | 14.9           | 24.6 | 6.8    | 15.1       | 24.5 | 6.9    |
| 75-84 years  | 9.2            | 16.8 | 3.9    | 9.2        | 16.6 | 4.0    |
| 85 years +   | 5.0            | 10.3 | 2.7    | 5.0        | 10.4 | 2.6    |

<sup>--\*</sup> Represents zero.
0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 13—DRUG-RELATED DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Age-specific drug-related death rates for Al/AN females are lower to those for Al/AN males except for age groups 15 through 64 years. However, some of these rates are based on small numbers and should be interpreted with caution. The highest female rate (34.6) occurs among the 35 to 44 year age group. Al/AN female age-specific rates are generally higher than those for U.S. all races and white females. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

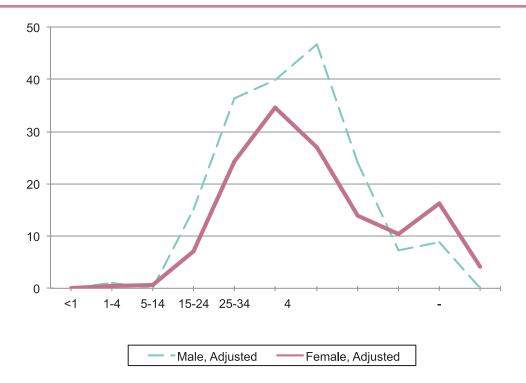




TABLE 13—DRUG-RELATED DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both S                            | exes                   | Male       |                        | Female     |                        |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              |                                   |                        |            |                        |            |                        |  |  |
| Under 1 year | 1.0                               | *                      | 0.0        | *                      | 0.0        | *                      |  |  |
| 1-4 years    | 0.8                               | 0.8                    | 1.1        | 1.1                    | 0.5        | 0.5                    |  |  |
| 5-14 years   | 0.3                               | 0.3                    | 0.0        | 0.0                    | 0.6        | 0.6                    |  |  |
| 15-24 years  | 8.8                               | 11.1                   | 11.9       | 15.1                   | 5.6        | 7.0                    |  |  |
| 25-34 years  | 21.9                              | 30.4                   | 27.8       | 36.3                   | 15.9       | 24.3                   |  |  |
| 35-44 years  | 30.6                              | 37.2                   | 34.3       | 39.9                   | 27.1       | 34.6                   |  |  |
| 45-54 years  | 30.8                              | 36.3                   | 39.8       | 46.7                   | 22.5       | 27.0                   |  |  |
| 55-64 years  | 16.7                              | 18.7                   | 21.4       | 24.1                   | 12.5       | 14.0                   |  |  |
| 65-74 years  | 8.9                               | 8.9                    | 7.2        | 7.2                    | 10.3       | 10.3                   |  |  |
| 75-84 years  | 10.3                              | 13.2                   | 6.7        | 8.9                    | 13.0       | 16.3                   |  |  |
| 85 years +   | 2.8                               | 2.8                    | *          | *                      | 4.1        | 4.1                    |  |  |

| Age Group    | U.S. All Races |      |        | U.S. White |      |        |
|--------------|----------------|------|--------|------------|------|--------|
| Age Group    | Both Sexes     | Male | Female | Both Sexes | Male | Female |
|              |                |      |        |            |      |        |
| Under 1 year | 0.9            | 0.0  | 0.0    | 0.8        | 0.0  | 0.0    |
| 1-4 years    | 0.2            | 0.3  | 0.0    | 0.0        | 0.0  | 0.0    |
| 5-14 years   | 0.1            | 0.1  | 0.1    | 0.1        | 0.1  | 0.0    |
| 15-24 years  | 7.3            | 10.6 | 3.8    | 8.8        | 12.8 | 4.4    |
| 25-34 years  | 14.6           | 20.1 | 9.0    | 16.5       | 22.7 | 10.1   |
| 35-44 years  | 21.5           | 26.9 | 16.0   | 23.0       | 28.7 | 17.1   |
| 45-54 years  | 23.6           | 29.4 | 18.0   | 23.7       | 28.8 | 18.8   |
| 55-64 years  | 10.6           | 12.9 | 8.4    | 10.2       | 11.7 | 8.8    |
| 65-74 years  | 4.7            | 5.2  | 4.3    | 4.8        | 5.0  | 4.6    |
| 75-84 years  | 5.4            | 6.7  | 4.5    | 5.6        | 6.7  | 4.8    |
| 85 years +   | 8.3            | 11.0 | 7.0    | 8.6        | 11.7 | 7.3    |

<sup>--\*</sup> Represents zero.

<sup>0.0</sup> Quantity more than zero but less than 0.05.

<sup>&</sup>lt;sup>1</sup>/Adjusted to compensate for misreporting of Al/AN race on state death certificates.

<sup>2</sup>The adjusted rate for age less than one year is <u>lower</u> than the unadjusted rate because the linked birth/infant death file (used to obtain the adjusted counts of infant deaths) had <u>fewer</u> deaths for this cause than did the unadjusted mortality file (2004-2006 data).

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 14—UNINTENTIONAL INJURY DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

The age specific death rate for unintentional injuries for Al/AN females is lower for all age groups in comparison with Al/AN males. However, when compared to U.S. all races and white females, the Al/AN female rate is higher for all age groups. The Al/AN female rate is at least 30 deaths per 100,000 population for all age groups except 5 to 14 years. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

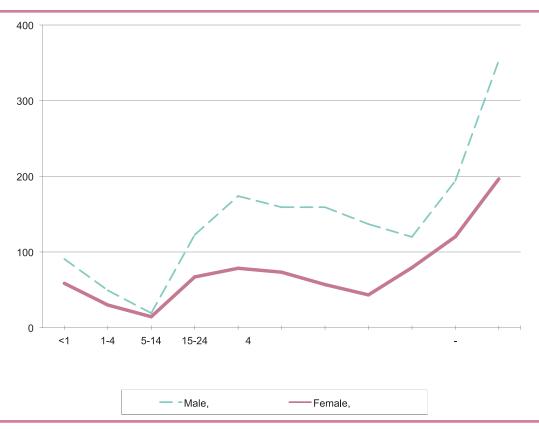




TABLE 14—UNINTENTIONAL UNJURY DEATH RATES BY AGE AND SEX
AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006
U.S. ALL RACES AND WHITE POPULATIONS, 2005

|              | American Indian and Alaska Native |            |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both Sexes                        |            | Male       |                        | Female     |                        |  |  |
|              | Unadjusted                        | Adjusted1/ | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              |                                   |            |            |                        |            |                        |  |  |
| Under 1 year | 68.9                              | 75.1       | 84.8       | 90.8                   | 52.4       | 58.7                   |  |  |
| 1-4 years    | 27.7                              | 39.8       | 32.3       | 49.3                   | 22.9       | 30.0                   |  |  |
| 5-14 years   | 13.7                              | 16.9       | 16.0       | 19.2                   | 11.3       | 14.5                   |  |  |
| 15-24 years  | 75.4                              | 95.4       | 103.0      | 122.8                  | 46.9       | 67.1                   |  |  |
| 25-34 years  | 97.0                              | 126.6      | 139.4      | 173.9                  | 53.9       | 78.5                   |  |  |
| 35-44 years  | 99.3                              | 115.4      | 140.2      | 159.1                  | 60.0       | 73.4                   |  |  |
| 45-54 years  | 94.9                              | 105.6      | 144.3      | 159.3                  | 50.1       | 56.9                   |  |  |
| 55-64 years  | 81.6                              | 87.7       | 127.8      | 136.9                  | 40.0       | 43.3                   |  |  |
| 65-74 years  | 91.8                              | 97.9       | 114.9      | 120.1                  | 72.6       | 79.4                   |  |  |
| 75-84 years  | 142.0                             | 151.4      | 178.5      | 194.1                  | 115.4      | 120.3                  |  |  |
| 85 years +   | 246.1                             | 246.1      | 353.1      | 353.1                  | 196.5      | 196.5                  |  |  |

| And Chaup    | U          | J.S. All Races |        | U.S. White |       |        |
|--------------|------------|----------------|--------|------------|-------|--------|
| Age Group    | Both Sexes | Male           | Female | Both Sexes | Male  | Female |
|              |            |                |        |            |       |        |
| Under 1 year | 27.0       | 28.2           | 25.8   | 23.8       | 24.6  | 23.0   |
| 1-4 years    | 10.5       | 12.6           | 8.2    | 10.3       | 12.6  | 7.8    |
| 5-14 years   | 5.9        | 7.2            | 4.7    | 5.7        | 6.9   | 4.5    |
| 15-24 years  | 37.1       | 54.3           | 19.0   | 40.4       | 59.1  | 20.6   |
| 25-34 years  | 35.7       | 54.1           | 17.0   | 38.0       | 56.9  | 18.3   |
| 35-44 years  | 38.9       | 55.6           | 22.4   | 40.6       | 57.5  | 23.5   |
| 45-54 years  | 43.2       | 62.3           | 24.7   | 43.3       | 61.7  | 25.1   |
| 55-64 years  | 35.4       | 50.8           | 21.1   | 34.8       | 48.9  | 21.4   |
| 65-74 years  | 45.7       | 61.5           | 32.2   | 45.7       | 60.8  | 32.6   |
| 75-84 years  | 106.0      | 137.9          | 84.0   | 107.6      | 138.6 | 85.9   |
| 85 years +   | 303.5      | 382.4          | 268.4  | 314.1      | 392.8 | 278.8  |

<sup>&</sup>lt;sup>1/</sup>Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 15—SUICIDE DEATH RATES BY AGE AND SEX AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN males are much more likely to die from suicide than Al/AN females. However, Al/AN female suicide rates are greater than those for U.S. all races and white females for age groups under 65 years. For older age groups, the Al/AN female rates are lower. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

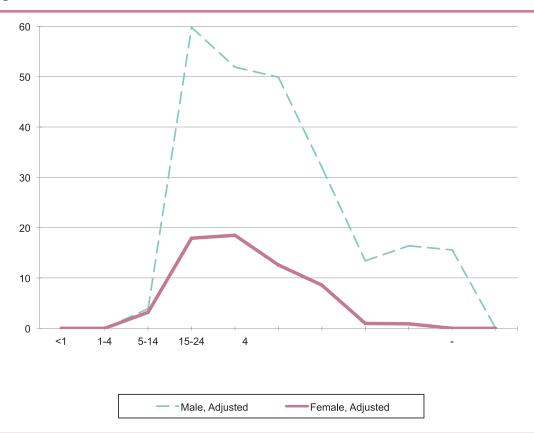




TABLE 15—SUICIDE DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both S                            | exes                   | Ma         | Male                   |            | Female                 |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              | 1                                 |                        |            | I                      |            |                        |  |  |
| Under 1 year | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 1-4 years    | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 5-14 years   | 3.4                               | 3.6                    | 3.9        | 3.9                    | 2.8        | 3.2                    |  |  |
| 15-24 years  | 33.1                              | 39.2                   | 51.1       | 59.8                   | 14.6       | 17.9                   |  |  |
| 25-34 years  | 28.9                              | 35.4                   | 44.4       | 51.9                   | 13.2       | 18.5                   |  |  |
| 35-44 years  | 26.1                              | 30.9                   | 41.8       | 49.9                   | 11.0       | 12.6                   |  |  |
| 45-54 years  | 18.3                              | 19.7                   | 29.4       | 32.0                   | 8.3        | 8.6                    |  |  |
| 55-64 years  | 6.8                               | 6.8                    | 13.4       | 13.4                   | 1.0        | 1.0                    |  |  |
| 65-74 years  | 7.0                               | 7.9                    | 14.4       | 16.4                   | 0.9        | 0.9                    |  |  |
| 75-84 years  | 5.6                               | 6.6                    | 13.4       | 15.6                   | *          | *                      |  |  |
| 85 years +   | *                                 | *                      | *          | *                      | *          | *                      |  |  |

| Ama Chaun    | Į          | J.S. All Race | s      | U.S. White |      |        |
|--------------|------------|---------------|--------|------------|------|--------|
| Age Group    | Both Sexes | Male          | Female | Both Sexes | Male | Female |
|              |            |               |        |            |      |        |
| Under 1 year | *          | *             | *      | *          | *    | *      |
| 1-4 years    | *          | *             | *      | *          | *    | *      |
| 5-14 years   | 0.7        | 1.0           | 0.3    | 0.7        | 1.0  | 0.3    |
| 15-24 years  | 9.9        | 16.1          | 3.5    | 10.7       | 17.3 | 3.7    |
| 25-34 years  | 12.7       | 20.6          | 4.7    | 13.8       | 22.1 | 5.2    |
| 35-44 years  | 15.1       | 23.4          | 6.8    | 17.0       | 26.0 | 7.8    |
| 45-54 years  | 16.5       | 25.2          | 8.0    | 18.6       | 28.3 | 9.1    |
| 55-64 years  | 13.7       | 22.0          | 6.0    | 15.3       | 24.3 | 6.7    |
| 65-74 years  | 12.4       | 22.3          | 4.0    | 13.6       | 24.5 | 4.2    |
| 75-84 years  | 16.8       | 35.5          | 4.0    | 18.1       | 38.0 | 4.2    |
| 85 years +   | 18.3       | 49.9          | 4.3    | 19.3       | 53.1 | 4.2    |

 $<sup>^{--*}\,</sup>$  Represents zero.  $^{1/}\!\!$  Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 16—HOMICIDE DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

The age specific homicide death rate for Al/AN females is lower for all age groups except 75 to 84 (where both rates are zero) and 85 years and older in comparison with Al/AN males. However, the Al/AN female rate is greater than the rate for U.S. all races and white females for all age groups except 75 to 84 and 85 years and over. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

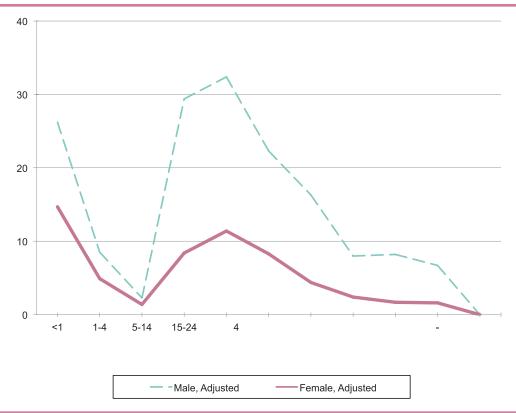




TABLE 16—HOMICIDE DEATH RATES BY AGE AND SEX
AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006
U.S. ALL RACES AND WHITE POPULATIONS, 2005

|              | American Indian and Alaska Native |                        |            |                        |            |            |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------|--|--|
| Age Group    | Both S                            | exes                   | Ma         | Male                   |            | Female     |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted1/ |  |  |
|              |                                   |                        |            |                        |            |            |  |  |
| Under 1 year | 14.4                              | 18.5                   | 18.2       | 26.2                   | 10.5       | 14.7       |  |  |
| 1-4 years    | 6.2                               | 6.7                    | 7.9        | 8.5                    | 4.4        | 4.9        |  |  |
| 5-14 years   | 1.3                               | 1.9                    | 1.6        | 2.3                    | 1.0        | 1.4        |  |  |
| 15-24 years  | 16.9                              | 19.6                   | 26.2       | 29.4                   | 6.4        | 8.4        |  |  |
| 25-34 years  | 18.2                              | 22.9                   | 27.3       | 32.4                   | 7.4        | 11.4       |  |  |
| 35-44 years  | 15.3                              | 16.5                   | 20.9       | 22.3                   | 7.5        | 8.3        |  |  |
| 45-54 years  | 9.6                               | 10.1                   | 15.7       | 16.3                   | 4.1        | 4.4        |  |  |
| 55-64 years  | 5.3                               | 5.3                    | 8.0        | 8.0                    | 2.4        | 2.4        |  |  |
| 65-74 years  | 4.7                               | 4.7                    | 8.2        | 8.2                    | 1.7        | 1.7        |  |  |
| 75-84 years  | 3.8                               | 3.8                    | 6.7        | 6.7                    | 1.6        | 1.6        |  |  |
| 85 years +   | *                                 | *                      | *          | *                      | *          | *          |  |  |

| And Chaus    | l          | J.S. All Races | 5      | U.S. White |      |        |
|--------------|------------|----------------|--------|------------|------|--------|
| Age Group    | Both Sexes | Male           | Female | Both Sexes | Male | Female |
|              |            |                |        |            |      |        |
| Under 1 year | 7.6        | 8.4            | 6.8    | 6.3        | 6.9  | 5.7    |
| 1-4 years    | 2.4        | 2.6            | 2.1    | 1.8        | 1.9  | 1.6    |
| 5-14 years   | 0.8        | 1.0            | 0.7    | 0.5        | 0.6  | 0.5    |
| 15-24 years  | 13.1       | 22.2           | 3.4    | 6.8        | 10.9 | 2.3    |
| 25-34 years  | 12.4       | 20.9           | 3.8    | 6.8        | 10.6 | 2.9    |
| 35-44 years  | 7.4        | 11.3           | 6.8    | 4.9        | 6.9  | 2.8    |
| 45-54 years  | 5.0        | 7.8            | 2.2    | 3.5        | 5.3  | 1.7    |
| 55-64 years  | 2.9        | 4.5            | 1.4    | 2.3        | 3.4  | 1.2    |
| 65-74 years  | 2.4        | 3.3            | 1.6    | 1.9        | 2.4  | 1.4    |
| 75-84 years  | 2.2        | 2.6            | 1.9    | 1.9        | 2.1  | 1.8    |
| 85 years +   | 2.3        | 3.0            | 2.0    | 2.1        | 2.1  | 1.0    |

<sup>--\*</sup> Represents zero.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

<sup>1/</sup>Adjusted to compensate for misreporting of Al/AN race on state death certificates.

# CHART 17—CHRONIC LIVER DISEASE AND CIRRHOSIS DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN males are more likely to die from chronic liver disease and cirrhosis than Al/AN females for all age groups over 24 years. In contrast, Al/AN females have a much higher death rate due to this cause than females in the U.S. all races and white populations. For example, the peak death rate for Al/AN females (79.4 deaths per 100,000 population for women aged 65-74 years) is 4.0 and 3.8 times the peak rates (19.7 and 20.9 for women 65 to 74 years old) for U.S. all races and white females, respectively. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

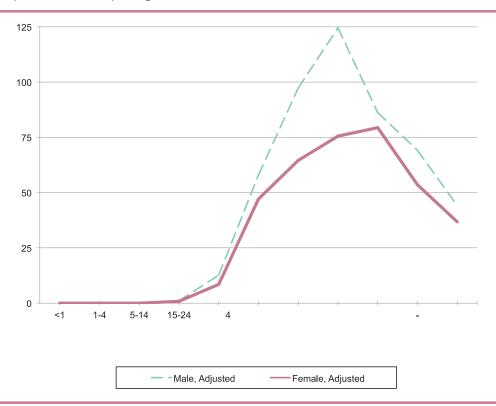




TABLE 17—CHRONIC LIVER DISEASE AND CIRRHOSIS DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both S                            | exes                   | Ma         | ale                    | Female     |                        |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              |                                   |                        |            |                        |            |                        |  |  |
| Under 1 year | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 1-4 years    | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 5-14 years   | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 15-24 years  | 0.8                               | 1.0                    | 0.9        | 1.1                    | 0.6        | 0.8                    |  |  |
| 25-34 years  | 9.7                               | 10.6                   | 12.2       | 12.7                   | 7.1        | 8.5                    |  |  |
| 35-44 years  | 44.2                              | 52.5                   | 48.8       | 58.0                   | 39.6       | 47.1                   |  |  |
| 45-54 years  | 69.4                              | 80.1                   | 85.5       | 97.3                   | 54.8       | 64.6                   |  |  |
| 55-64 years  | 86.6                              | 98.7                   | 109.6      | 124.6                  | 65.9       | 75.6                   |  |  |
| 65-74 years  | 74.9                              | 82.4                   | 78.0       | 86.2                   | 72.6       | 79.4                   |  |  |
| 75-84 years  | 56.3                              | 60.0                   | 64.7       | 69.2                   | 50.4       | 53.6                   |  |  |
| 85 years +   | 39.1                              | 39.1                   | 44.1       | 44.1                   | 36.8       | 36.8                   |  |  |

| Ama Cuaum    |            | U.S. All Races |        | U.S. White |      |        |
|--------------|------------|----------------|--------|------------|------|--------|
| Age Group    | Both Sexes | Male           | Female | Both Sexes | Male | Female |
|              |            |                |        |            |      |        |
| Under 1 year | 0.0        | 0.0            | 0.0    | 0.0        | 0.0  | 0.0    |
| 1-4 years    | 0.0        | 0.0            | *      | 0.0        | 0.0  | *      |
| 5-14 years   | 0.0        | 0.0            | 0.0    | 0.0        | 0.0  | 0.0    |
| 15-24 years  | 0.1        | 0.0            | 0.0    | 0.0        | 0.0  | 0.0    |
| 25-34 years  | 0.8        | 1.0            | 0.8    | 0.8        | 1.0  | 0.5    |
| 35-44 years  | 6.2        | 8.3            | 4.1    | 6.5        | 8.8  | 4.3    |
| 45-54 years  | 17.7       | 26.0           | 9.7    | 18.1       | 26.7 | 9.7    |
| 55-64 years  | 23.3       | 34.5           | 12.8   | 23.6       | 34.8 | 13.0   |
| 65-74 years  | 26.8       | 35.1           | 19.7   | 28.2       | 36.6 | 20.9   |
| 75-84 years  | 28.9       | 36.1           | 24.0   | 29.8       | 36.8 | 25.0   |
| 85 years +   | 21.3       | 30.6           | 17.2   | 21.8       | 31.4 | 17.6   |

<sup>--\*</sup> Represents zero.
0.0 Quantity more than zero but less than 0.05.

<sup>&</sup>lt;sup>1/</sup>Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 18—DIABETES MELLITUS DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN women die from diabetes mellitus at a greater rate than Al/AN males for age groups 65-74 years. The male rate exceeds the female rate for age groups 25 through 64 years. Deaths due to diabetes mellitus become relatively high starting with age 55 for Al/AN females. For this age group, Al/AN females are much more likely to die from this cause than females in the other two population groups. In this age group, the Al/AN female rate is 125.1 deaths per 100,000 population while the U.S. all races female rate is 29.8 and the U.S. white female rate is 25.6. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

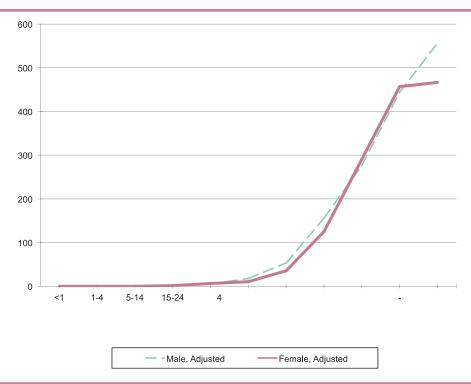




TABLE 18—DIABETES MELLITUS DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both S                            | exes                   | Ma         | le                     | Female     |                        |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              |                                   |                        |            |                        |            |                        |  |  |
| Under 1 year | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 1-4 years    | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 5-14 years   | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 15-24 years  | 0.5                               | 1.0                    | 0.4        | 0.6                    | 0.6        | 1.4                    |  |  |
| 25-34 years  | 4.6                               | 5.9                    | 4.9        | 5.5                    | 4.2        | 6.3                    |  |  |
| 35-44 years  | 11.9                              | 14.3                   | 15.6       | 18.1                   | 8.8        | 10.7                   |  |  |
| 45-54 years  | 37.6                              | 44.1                   | 46.0       | 53.5                   | 29.9       | 35.6                   |  |  |
| 55-64 years  | 114.0                             | 139.8                  | 128.9      | 156.2                  | 100.6      | 125.1                  |  |  |
| 65-74 years  | 230.3                             | 283.9                  | 219.6      | 276.1                  | 239.2      | 290.4                  |  |  |
| 75-84 years  | 371.5                             | 451.4                  | 361.5      | 444.0                  | 378.7      | 456.8                  |  |  |
| 85 years +   | 475.5                             | 495.1                  | 538.4      | 556.1                  | 446.3      | 466.8                  |  |  |

| Ama Chaun    | Į          | J.S. All Races | s      | U.S. White |       |        |
|--------------|------------|----------------|--------|------------|-------|--------|
| Age Group    | Both Sexes | Male           | Female | Both Sexes | Male  | Female |
|              |            |                |        |            |       |        |
| Under 1 year | 0.0        | *              | 0.0    | 0.0        | *     | 0.0    |
| 1-4 years    | 0.0        | *              | 0.0    | 0.0        | *     | 0.0    |
| 5-14 years   | 0.1        | 0.0            | 0.1    | 0.1        | 0.0   | 0.0    |
| 15-24 years  | 0.5        | 0.5            | 0.4    | 0.4        | 0.4   | 0.3    |
| 25-34 years  | 1.6        | 1.9            | 1.3    | 1.2        | 1.5   | 1.0    |
| 35-44 years  | 4.7        | 5.9            | 3.5    | 4.1        | 5.2   | 3.0    |
| 45-54 years  | 13.4       | 16.6           | 10.3   | 11.7       | 14.7  | 8.7    |
| 55-64 years  | 36.9       | 44.5           | 29.8   | 32.6       | 39.9  | 25.6   |
| 65-74 years  | 85.7       | 97.9           | 75.3   | 76.8       | 89.8  | 65.5   |
| 75-84 years  | 177.0      | 201.1          | 160.4  | 165.0      | 191.8 | 146.3  |
| 85 years +   | 338.8      | 382.5          | 319.4  | 319.9      | 370.2 | 297.3  |

<sup>0.0</sup> Quantity more than zero but less than 0.05.

<sup>1</sup>/Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 19—HEART DISEASE DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN men are more apt to die from diseases of the heart than Al/AN women for every age group, except under one year and 5 to 14 years old. The Al/AN female death rate for diseases of the heart is greater than the rates for U.S. all races and white females in all age groups, but is less for age groups 75 years and over. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

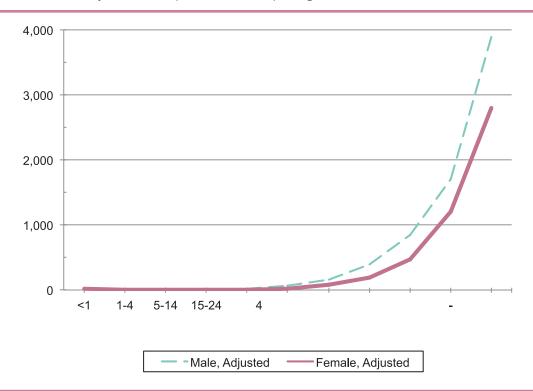




TABLE 19—HEART DISEASE DEATH RATES BY AGE AND SEX
AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006
U.S. ALL RACES AND WHITE POPULATIONS, 2005

|              |            | tive                   |            |                        |            |                        |
|--------------|------------|------------------------|------------|------------------------|------------|------------------------|
| Age Group    | Both S     | exes                   | Male       |                        | Female     |                        |
|              | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |
|              |            |                        |            |                        |            |                        |
| Under 1 year | 19.82/     | 15.42/                 | 18.22/     | 12.12/                 | 21.02/     | 18.92/                 |
| 1-4 years    | 0.5        | 0.8                    | 0.5        | 1.1                    | 0.5        | 0.5                    |
| 5-14 years   | 0.5        | 0.5                    | 0.2        | 0.2                    | 0.8        | 0.8                    |
| 15-24 years  | 3.0        | 3.8                    | 3.2        | 4.1                    | 2.7        | 3.5                    |
| 25-34 years  | 13.1       | 15.8                   | 18.2       | 21.5                   | 7.9        | 10.0                   |
| 35-44 years  | 39.1       | 45.8                   | 57.4       | 65.5                   | 21.4       | 26.8                   |
| 45-54 years  | 102.7      | 119.1                  | 145.6      | 166.8                  | 63.7       | 75.9                   |
| 55-64 years  | 243.2      | 286.8                  | 334.3      | 394.2                  | 161.2      | 190.1                  |
| 65-74 years  | 533.8      | 643.3                  | 701.9      | 852.8                  | 393.8      | 469.0                  |
| 75-84 years  | 1,187.8    | 1,416.3                | 1,405.7    | 1,713.6                | 1,028.9    | 1,199.6                |
| 85 years +   | 2,917.2    | 3,141.0                | 3,477.8    | 3,892.7                | 2,657.2    | 2,792.3                |

| Are Creun    | Į.         | J.S. All Races |         |            | U.S. White |         |
|--------------|------------|----------------|---------|------------|------------|---------|
| Age Group    | Both Sexes | Male           | Female  | Both Sexes | Male       | Female  |
|              |            |                |         |            |            |         |
| Under 1 year | 8.9        | 9.6            | 8.2     | 7.4        | 7.9        | 6.9     |
| 1-4 years    | 0.9        | 1.0            | 0.9     | 0.8        | 0.9        | 0.6     |
| 5-14 years   | 0.6        | 0.6            | 0.6     | 0.5        | 0.6        | 0.5     |
| 15-24 years  | 2.6        | 3.5            | 1.7     | 2.0        | 3.0        | 1.4     |
| 25-34 years  | 8.3        | 11.2           | 5.3     | 6.8        | 9.4        | 4.1     |
| 35-44 years  | 29.2       | 41.3           | 17.2    | 26.7       | 37.8       | 14.2    |
| 45-54 years  | 89.7       | 131.6          | 49.1    | 81.2       | 122.0      | 40.9    |
| 55-64 years  | 212.8      | 303.9          | 128.0   | 197.9      | 286.4      | 113.8   |
| 65-74 years  | 512.3      | 680.1          | 369.5   | 494.1      | 661.1      | 349.2   |
| 75-84 years  | 1,458.5    | 1,815.1        | 1,213.8 | 1,448.9    | 1,812.9    | 1,195.1 |
| 85 years +   | 5,188.3    | 5,713.2        | 4,955.1 | 5,266.9    | 5,824.6    | 5,017.5 |

<sup>&</sup>lt;sup>1/</sup>Adjusted to compensate for misreporting of AI/AN race on state death certificates.

<sup>&</sup>lt;sup>2</sup>The adjusted rate for age less than one year is <u>lower</u> than the unadjusted rate because the linked birth/infant death file (used to obtain the adjusted counts of infant deaths) had <u>fewer</u> deaths for this cause than did the unadjusted mortality file (2004-2006 data).

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 20—CEREBROVASCULAR DISEASES DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

The cerebrovascular diseases death rates are similar for Al/AN males and females among the various age groups, except for age group 85 years and over. The Al/AN female death rate for this cause tends to be less than the rates for U.S. all races and white females in age group 85 and over. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

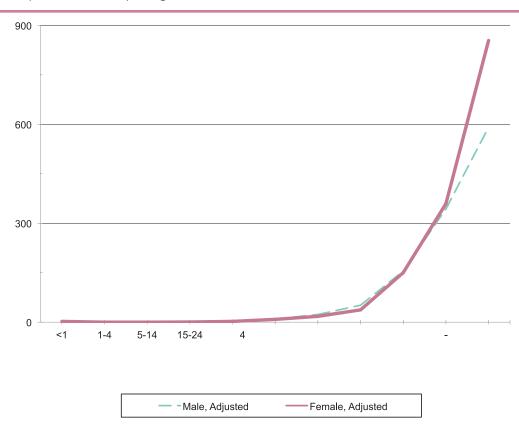




TABLE 20—CEREBROVASCULAR DISEASES DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              |            | Ame                    | rican Indian a | nd Alaska Na           | tive       |                        |
|--------------|------------|------------------------|----------------|------------------------|------------|------------------------|
| Age Group    | Both S     | exes                   | Male           |                        | Female     |                        |
|              | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted     | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |
|              |            |                        |                |                        |            |                        |
| Under 1 year | 4.12/      | 2.12/                  | 4.02/          | 2.02/                  | 4.22/      | 2.12/                  |
| 1-4 years    | 0.3        | 0.3                    | 0.5            | 0.5                    | *          | *                      |
| 5-14 years   | 0.2        | 0.2                    | 0.2            | 0.2                    | 0.2        | 0.2                    |
| 15-24 years  | 0.4        | 0.6                    | 0.4            | 0.6                    | 0.4        | 0.6                    |
| 25-34 years  | 1.3        | 1.7                    | 1.3            | 1.3                    | 1.3        | 2.1                    |
| 35-44 years  | 7.9        | 9.2                    | 8.6            | 9.8                    | 7.2        | 8.6                    |
| 45-54 years  | 18.2       | 20.3                   | 20.9           | 23.2                   | 15.7       | 17.8                   |
| 55-64 years  | 37.2       | 43.8                   | 44.4           | 51.3                   | 30.8       | 37.1                   |
| 65-74 years  | 125.4      | 152.4                  | 126.2          | 155.0                  | 124.7      | 150.4                  |
| 75-84 years  | 293.4      | 352.7                  | 285.6          | 343.6                  | 299.1      | 359.2                  |
| 85 years +   | 752.4      | 791.5                  | 556.1          | 591.4                  | 843.4      | 854.4                  |

| Ama Chaun    | ı          | U.S. All Races |         |            | U.S. White |         |
|--------------|------------|----------------|---------|------------|------------|---------|
| Age Group    | Both Sexes | Male           | Female  | Both Sexes | Male       | Female  |
|              |            |                |         |            |            |         |
| Under 1 year | 3.1        | 3.6            | 2.7     | 2.6        | 2.9        | 2.2     |
| 1-4 years    | 0.4        | 0.5            | 0.3     | 0.4        | 0.4        | 0.0     |
| 5-14 years   | 0.2        | 0.3            | 0.2     | 0.2        | 0.2        | 0.2     |
| 15-24 years  | 0.5        | 0.4            | 0.5     | 0.4        | 0.4        | 0.4     |
| 25-34 years  | 1.4        | 1.5            | 1.3     | 1.2        | 1.3        | 1.1     |
| 35-44 years  | 5.2        | 5.3            | 5.1     | 4.2        | 4.3        | 4.0     |
| 45-54 years  | 15.0       | 16.5           | 13.6    | 11.7       | 12.9       | 10.5    |
| 55-64 years  | 32.7       | 38.2           | 27.7    | 27.5       | 31.5       | 23.7    |
| 65-74 years  | 99.8       | 111.6          | 89.7    | 91.3       | 101.3      | 82.6    |
| 75-84 years  | 358.4      | 370.0          | 350.4   | 350.7      | 361.0      | 343.4   |
| 85 years +   | 1,239.7    | 1,136.7        | 1,285.5 | 1,245.0    | 1,138.5    | 1,292.6 |

 $<sup>-^\</sup>ast$  Represents zero.  $^{1\!}$  Adjusted to compensate for misreporting of Al/AN race on state death certificates.

The adjusted rate for age less than one year is <u>lower</u> than the unadjusted rate because the linked birth/infant death file (used to obtain the adjusted counts of infant deaths) had <u>fewer</u> deaths for this cause than did the unadjusted mortality file (2004-2006 data).

 $SOURCE: \ Rates \ for \ U.S. \ All \ Races \ and \ U.S. \ White: \ Centers \ for \ Disease \ Control \ and \ Prevention. \ CDC \ Wonder. \ http://wonder.cdc.gov.$ 

# CHART 21—MALIGNANT NEOPLASM DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

The age-specific malignant neoplasm death rate (2004-2006) for Al/AN males is 101 percent greater than that for Al/AN females for ages 85 and over. However, for the age group 35 to 44 years, the female rate is 1.4 times the male rate. Al/AN female age specific rates are greater than those for females of these two population groups for age groups 25 years through 74 years. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

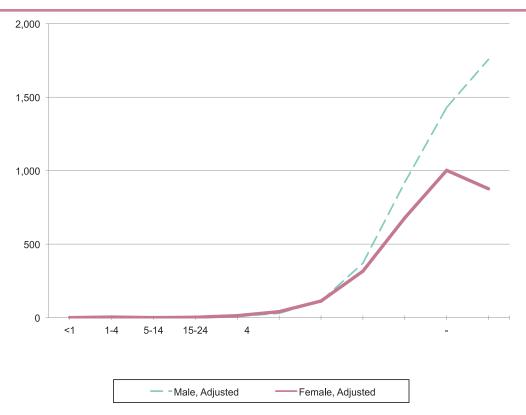




TABLE 21—MALIGNANT NEOPLASM DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              |            | itive                  |            |                        |            |                        |  |
|--------------|------------|------------------------|------------|------------------------|------------|------------------------|--|
| Age Group    | Both S     | exes                   | Ma         | Male                   |            | Female                 |  |
|              | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |
|              |            |                        |            |                        |            |                        |  |
| Under 1 year | 1.02/      | 1.02/                  | 2.02/      | 2.02/                  | *          | *                      |  |
| 1-4 years    | 2.1        | 3.0                    | 1.6        | 2.1                    | 2.7        | 3.8                    |  |
| 5-14 years   | 1.2        | 1.7                    | 2.0        | 2.9                    | 0.4        | 0.4                    |  |
| 15-24 years  | 3.7        | 4.6                    | 4.9        | 6.2                    | 2.5        | 2.9                    |  |
| 25-34 years  | 8.0        | 10.7                   | 6.5        | 8.6                    | 9.5        | 12.9                   |  |
| 35-44 years  | 31.6       | 35.4                   | 27.6       | 29.5                   | 35.4       | 41.0                   |  |
| 45-54 years  | 100.0      | 112.5                  | 102.2      | 112.3                  | 98.1       | 112.6                  |  |
| 55-64 years  | 292.6      | 341.5                  | 323.6      | 370.1                  | 264.7      | 315.8                  |  |
| 65-74 years  | 669.0      | 787.8                  | 778.9      | 919.5                  | 577.5      | 678.3                  |  |
| 75-84 years  | 1,022.2    | 1,182.1                | 1,209.3    | 1,430.2                | 885.9      | 1,001.3                |  |
| 85 years +   | 1,127.2    | 1,155.1                | 1,668.3    | 1,756.6                | 876.2      | 876.3                  |  |

| Ama Cuaum    |            | U.S. All Races |         |            | U.S. White |         |
|--------------|------------|----------------|---------|------------|------------|---------|
| Age Group    | Both Sexes | Male           | Female  | Both Sexes | Male       | Female  |
|              |            |                |         |            |            |         |
| Under 1 year | 1.9        | 2.2            | 1.5     | 2.1        | 2.4        | 1.7     |
| 1-4 years    | 2.4        | 2.7            | 2.1     | 2.4        | 2.7        | 2.1     |
| 5-14 years   | 2.5        | 2.7            | 2.2     | 2.5        | 2.7        | 2.4     |
| 15-24 years  | 4.0        | 4.8            | 3.3     | 4.1        | 4.9        | 3.4     |
| 25-34 years  | 9.2        | 9.2            | 9.2     | 8.8        | 8.8        | 8.8     |
| 35-44 years  | 33.5       | 29.3           | 37.6    | 32.5       | 28.9       | 36.2    |
| 45-54 years  | 118.6      | 121.7          | 115.7   | 113.6      | 116.3      | 110.9   |
| 55-64 years  | 323.9      | 365.8          | 284.8   | 317.3      | 354.2      | 282.2   |
| 65-74 years  | 733.2      | 883.1          | 605.6   | 734.2      | 875.6      | 611.5   |
| 75-84 years  | 1,272.8    | 1,636.8        | 1,023.0 | 1,277.3    | 1,629.2    | 1,032.0 |
| 85 years +   | 1,778.2    | 2,576.2        | 1,423.6 | 1,776.1    | 2,558.2    | 1,426.4 |

<sup>--\*</sup> Represents zero.

"Adjusted to compensate for misreporting of Al/AN race on state death certificates.

<sup>&</sup>lt;sup>2</sup>The adjusted rate for age less than one year is the <u>same</u> than the unadjusted rate because the linked birth/infant death file (used to obtain the adjusted counts of infant deaths) had the same number of deaths for this cause than did the unadjusted mortality file (2004-2006 data).

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 22—DEATH RATES, LEADING CANCER SITES: FEMALES AMERICAN INDIANS AND ALASKA NATIVES, 2004-2006

The leading site for cancer deaths among Al/AN women is trachea, bronchus, and lung. Eighty-three (83) percent more Al/AN women die of this type of cancer than the next leading site, breast. In turn, 55 percent more Al/AN women die from breast cancer than colon cancer, the third leading site. There is also a big drop in frequency of deaths from colon cancer to the fourth leading site, pancreas. In contrast, the next leading site (ovary) has a cancer mortality rate similar to pancreas. These Al/AN counts have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

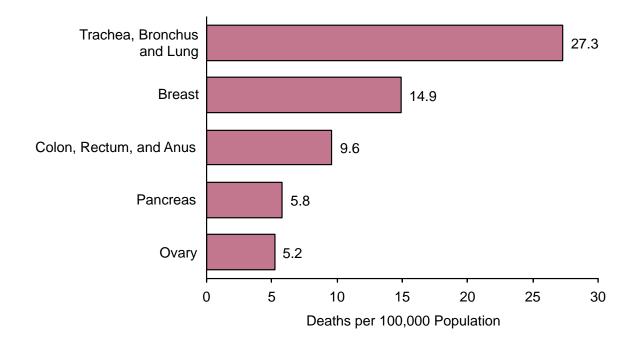




TABLE 22—LEADING SITES FOR CANCER DEATHS FOR FEMALES

AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006

(Rate per 100,000 Population)

|   | Num        | ber                    | Ra         | te                     |
|---|------------|------------------------|------------|------------------------|
| Site of Cancer Death                    | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |
|   |            |                        |            |                        |
| All Sites                               | 2,372      | 2,741                  | 88.8       | 102.5                  |
|   |            |                        |            |                        |
| Trachea, bronchus and lung              | 599        | 750                    | 21.8       | 27.3                   |
| Breast                                  | 343        | 408                    | 12.5       | 14.9                   |
| Colon, rectum, and anus                 | 226        | 263                    | 8.2        | 9.6                    |
| Pancreas                                | 146        | 159                    | 5.3        | 5.8                    |
| Ovary                                   | 125        | 143                    | 4.6        | 5.2                    |
| Liver/intraehepatic bile ducts          | 90         | 95                     | 3.3        | 3.5                    |
| Non-Hodgkin Lymphoma                    | 83         | 89                     | 3.0        | 3.2                    |
| Kidney and renal pelvis                 | 69         | 77                     | 2.5        | 2.8                    |
| Stomach                                 | 72         | 74                     | 2.6        | 2.7                    |
| Cervical                                | 66         | 73                     | 2.4        | 2.7                    |
| Leukemia                                | 61         | 64                     | 2.2        | 2.3                    |
| Mutiple myeloma                         | 55         | 60                     | 2.0        | 2.2                    |
| Uterus                                  | 53         | 54                     | 1.9        | 2.0                    |
| Gallbladder                             | 41         | 46                     | 1.5        | 1.7                    |
| Esophagus                               | 32         | 32                     | 1.2        | 1.2                    |
| Brain, meninges, central nervous system | 22         | 25                     | 0.8        | 0.9                    |
| Soft tissue including heart             | 21         | 25                     | 0.8        | 0.9                    |
| Lip, oral cavity, and pharynx           | 21         | 21                     | 0.8        | 0.8                    |
| Urinary bladder                         | *          | *                      | 0.5        | 0.6                    |
| Melanoma of skik                        | *          | *                      | 0.5        | 0.5                    |
| Vulva                                   | *          | *                      | 0.3        | 0.4                    |
| Bone and joints                         | *          | *                      | 0.3        | 0.3                    |
| Thyroid/endocrine                       | *          | *                      | 0.3        | 0.3                    |
| Larynx                                  | *          | *                      | 0.2        | 0.2                    |
| Mesothelioma                            | *          | *                      | 0.1        | 0.1                    |
| Hodgkin lymphoma                        | *          | *                      | 0.1        | 0.1                    |
| Ureter                                  | *          | *                      | 0.0        | 0.0                    |
| All other sites                         | 247        | 283                    | 9.0        | 10.5                   |

<sup>\*</sup> Number of deaths is less than 20.

<sup>0.0</sup> Quantity more than zero but less than 0.05.

<sup>&</sup>lt;sup>1</sup>/Adjusted to compensate for misreporting of Al/AN race on state death certificates.

NOTE: See appendix titled "Method Used to Rank Leading Sites of Cancer Deaths." Causes of death listed are based on the order of adjusted number of deaths.

#### CHART 23—AGE-ADJUSTED FEMALE BREAST CANCER DEATH RATES, CALENDAR YEARS 2004-2006

The Al/AN female age-adjusted breast cancer death rate (21.0 deaths per 100,000 population) is 87 percent of the rate for U.S. all races females (24.1). The rate varies considerably by IHS Area, ranging from 11.3 in Navajo to 33.1 in Billings. These AI/AN rates have been adjusted to compensate for misreporting of AI/AN race on state death certificates.

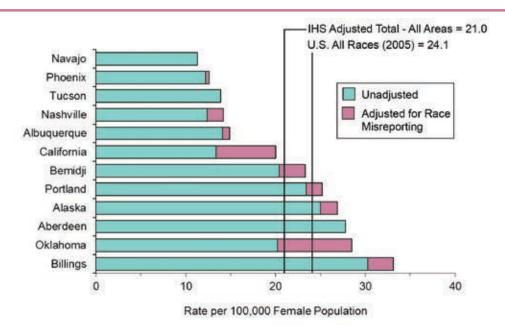


TABLE 23—AGE-ADJUSTED FEMALE BREAST CANCER DEATH RATES, CALENDAR YEARS 2004-2006

|                       | Deat       | hs                     | Rate       | e <sup>1/</sup>        |
|-----------------------|------------|------------------------|------------|------------------------|
|                       | Unadjusted | Adjusted <sup>2/</sup> | Unadjusted | Adjusted <sup>2/</sup> |
|                       |            |                        |            |                        |
| U.S. All Races (2005) | 41,116     |                        | 24.1       |                        |
|                       |            |                        |            |                        |
| All IHS Areas         | 343        | 408                    | 17.83/     | 21.03/                 |
| Aberdeen              | 27         | 27                     | 27.8       | 27.8                   |
| Alaska                | 32         | 35                     | 25.0       | 26.9                   |
| Albuquerque           | 17         | 18                     | 14.1       | 14.9                   |
| Bemidji               | 21         | 24                     | 20.4       | 23.3                   |
| Billings              | 17         | 18                     | 30.3       | 33.1                   |
| California            | 25         | 38                     | 13.4       | 20.0                   |
| Nashville             | 18         | 21                     | 12.4       | 14.2                   |
| Navajo                | 30         | 30                     | 11.3       | 11.3                   |
| Oklahoma              | 85         | 122                    | 20.2       | 28.5                   |
| Phoenix               | 26         | 27                     | 12.2       | 12.6                   |
| Portland              | 41         | 44                     | 23.4       | 25.2                   |
| Tucson                | *          | *                      | 13.9       | 13.9                   |

<sup>&</sup>lt;sup>1</sup>/Age-adjusted rate per 100,000 female population. Rates based on a small number of deaths should be interpreted with caution. 
<sup>2</sup>/Adjusted to compensate for misreporting of American Indian/Alaska Native race on the state death certificate.

<sup>&</sup>lt;sup>31</sup>Calculated unadjusted and adjusted rates include all Indian Health Service Areas with suppressed counts.

#### CHART 24—AGE-ADJUSTED CERVICAL CANCER DEATH RATES, CALENDAR YEARS 2004-2006

The Al/AN female age adjusted cervical cancer death rate (3.3 deaths per 100,000 population) is 1.4 times the rate for U.S. all races females (2.4). The rate varies considerably by IHS Area, ranging from 1.1 in California to 6.3 in Aberdeen, which is 2.6 times the U.S. all races rate. These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

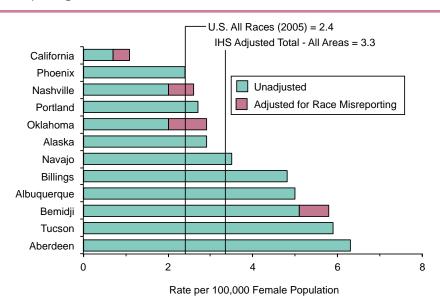


TABLE 24—AGE-ADJUSTED CERVICAL CANCER DEATH RATES, CALENDAR YEARS 2004-2006

|                       | Deat       | hs                     | Rate       | e <sup>1/</sup>        |
|-----------------------|------------|------------------------|------------|------------------------|
|                       | Unadjusted | Adjusted <sup>2/</sup> | Unadjusted | Adjusted <sup>2/</sup> |
|                       |            |                        |            |                        |
| U.S. All Races (2005) | 3,924      |                        | 2.4        |                        |
|                       |            |                        |            |                        |
| All IHS Areas         | 66³/       | 733/                   | 3.04/      | 3.34/                  |
|                       |            |                        |            |                        |
| Aberdeen              | *          | *                      | 6.3        | 6.3                    |
| Alaska                | *          | *                      | 2.9        | 2.9                    |
| Albuquerque           | *          | *                      | 5.0        | 5.0                    |
| Bemidji               | *          | *                      | 5.1        | 5.8                    |
| Billings              | *          | *                      | 4.8        | 4.8                    |
| California            | *          | *                      | 0.7        | 1.1                    |
| Nashville             | *          | *                      | 2.0        | 2.6                    |
| Navajo                | *          | *                      | 3.5        | 3.5                    |
| Oklahoma              | *          | 13                     | 2.0        | 2.9                    |
| Phoenix               | *          | *                      | 2.4        | 2.4                    |
| Portland              | *          | *                      | 2.7        | 2.7                    |
| Tucson                | *          | *                      | 5.9        | 5.9                    |

<sup>\*</sup> Quantity greater than zero and less than 10.

<sup>&</sup>lt;sup>11</sup>Age-adjusted rate per 100,000 <u>female</u> population. Rates based on a small number of deaths should be interpreted with caution.

<sup>&</sup>lt;sup>2</sup>/Adjusted to compensate for misreporting of American Indian/Alaska Native race on the state death certificate.

<sup>3</sup>Total number of deaths for the Indian Health Service includes suppressed counts (counts greater than zero and less than 10).

<sup>&</sup>lt;sup>4/</sup>Calculated unadjusted and adjusted rates include all Indian Health Service Areas with suppressed counts.

# CHART 25—PNEUMONIA AND INFLUENZA DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

Al/AN female age specific pneumonia and influenza death rates are less than Al/AN male rates for all age groups, except 1 through 24 years. When compared to the U.S. general population, it is clear that Al/AN are more likely to die from pneumonia and influenza than U.S. all races and white people. Al/AN female age specific rates are greater than those for females of these two population groups for all age groups except for one group (85 years and over). These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on state death certificates.

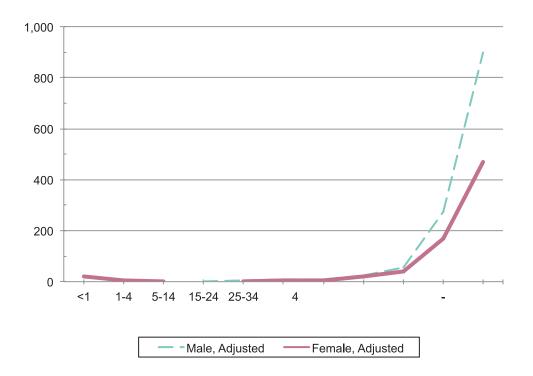




TABLE 25—PNEUMONIA AND INFLUENZA DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              |            | tive                   |            |                        |            |                        |  |
|--------------|------------|------------------------|------------|------------------------|------------|------------------------|--|
| Age Group    | Both S     | exes                   | Ma         | Male                   |            | Female                 |  |
|              | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |
|              |            |                        |            |                        |            |                        |  |
| Under 1 year | 20.62/     | 19.5 <sup>2/</sup>     | 18.2       | 20.2                   | 23.12/     | 18.92/                 |  |
| 1-4 years    | 1.9        | 2.1                    | 1.1        | 1.1                    | 2.7        | 3.3                    |  |
| 5-14 years   | 0.3        | 0.3                    | 0.2        | 0.2                    | 0.4        | 0.4                    |  |
| 15-24 years  | 0.3        | 0.4                    | 0.2        | 0.2                    | 0.4        | 0.6                    |  |
| 25-34 years  | 2.1        | 2.6                    | 2.6        | 3.1                    | 1.6        | 2.1                    |  |
| 35-44 years  | 6.1        | 7.0                    | 7.8        | 8.4                    | 4.6        | 5.6                    |  |
| 45-54 years  | 8.1        | 8.4                    | 10.1       | 10.4                   | 6.2        | 6.5                    |  |
| 55-64 years  | 19.8       | 21.8                   | 20.3       | 22.5                   | 19.3       | 21.2                   |  |
| 65-74 years  | 43.8       | 47.8                   | 51.3       | 55.4                   | 37.6       | 41.0                   |  |
| 75-84 years  | 188.1      | 213.5                  | 238.7      | 274.4                  | 151.2      | 169.1                  |  |
| 85 years +   | 570.6      | 606.9                  | 820.9      | 900.3                  | 454.2      | 470.8                  |  |

| Ama Cuaum    | l          | U.S. All Races |        |            | U.S. White |        |
|--------------|------------|----------------|--------|------------|------------|--------|
| Age Group    | Both Sexes | Male           | Female | Both Sexes | Male       | Female |
|              |            |                |        |            |            |        |
| Under 1 year | 6.6        | 7.2            | 6.0    | 5.1        | 6.1        | 4.1    |
| 1-4 years    | 0.7        | 0.7            | 0.7    | 0.6        | 0.6        | 0.7    |
| 5-14 years   | 0.3        | 0.3            | 0.3    | 0.2        | 0.2        | 0.3    |
| 15-24 years  | 0.4        | 0.5            | 0.3    | 0.4        | 0.5        | 0.3    |
| 25-34 years  | 0.9        | 1.0            | 0.8    | 0.9        | 0.9        | 0.8    |
| 35-44 years  | 2.1        | 2.5            | 1.8    | 2.0        | 2.2        | 1.7    |
| 45-54 years  | 5.1        | 6.2            | 4.1    | 4.6        | 5.5        | 3.8    |
| 55-64 years  | 11.2       | 13.5           | 9.0    | 10.4       | 12.2       | 8.7    |
| 65-74 years  | 35.1       | 42.0           | 29.2   | 33.8       | 39.9       | 28.5   |
| 75-84 years  | 142.0      | 173.0          | 120.7  | 142.1      | 172.0      | 121.3  |
| 85 years +   | 644.9      | 748.1          | 599.0  | 654.5      | 753.8      | 610.1  |

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

<sup>&</sup>lt;sup>1</sup>/Adjusted to compensate for misreporting of Al/AN race on state death certificates.
<sup>2</sup>/The adjusted rate for age less than one year is <u>lower</u> than the unadjusted rate because the linked birth/infant death file (used to obtain the adjusted counts of infant deaths) had <u>fewer</u> deaths for this cause then did the unadjusted mortality file (2004-2006 data).

# CHART 26—ALZHEIMER'S DISEASE DEATH RATES BY AGE AND SEX, AMERICAN INDIANS AND ALASKA NATIVES (2004-2006)

The age-specific Alzheimer's death rate (2004-2006) for Al/AN females was higher than Al/AN males beginning in age group 75-84. In age group 85 years and over the Al/AN female rate 487.2 was 112.5 percent lower than the U.S. all races female rate (1,035.4) and over 119.0 percent lower than U.S. white female rate (1,067.0). These Al/AN rates have been adjusted to compensate for misreporting of Al/AN race on the state death certificates.

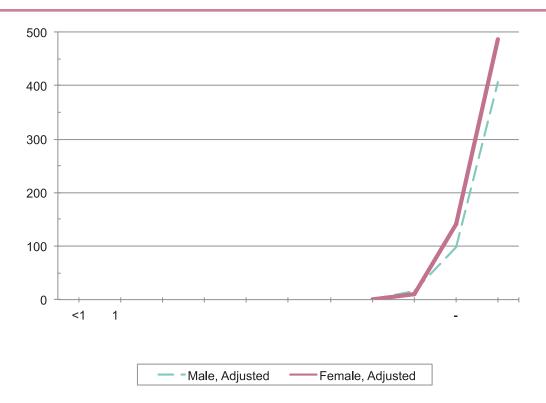




TABLE 26—ALZHEIMER'S DISEASE DEATH RATES BY AGE AND SEX **AMERICAN INDIANS AND ALASKA NATIVES, IHS SERVICE AREA, 2004-2006 U.S. ALL RACES AND WHITE POPULATIONS, 2005** 

|              | American Indian and Alaska Native |                        |            |                        |            |                        |  |  |
|--------------|-----------------------------------|------------------------|------------|------------------------|------------|------------------------|--|--|
| Age Group    | Both 9                            | Sexes                  | Ma         | Male                   |            | Female                 |  |  |
|              | Unadjusted                        | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> | Unadjusted | Adjusted <sup>1/</sup> |  |  |
|              |                                   |                        |            |                        |            |                        |  |  |
| Under 1 year | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 1-4 years    | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 5-14 years   | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 15-24 years  | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 25-34 years  | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 35-44 years  | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 45-54 years  | *                                 | *                      | *          | *                      | *          | *                      |  |  |
| 55-64 years  | 0.8                               | 0.8                    | 1.1        | 1.1                    | 0.5        | 0.5                    |  |  |
| 65-74 years  | 12.6                              | 13.0                   | 15.4       | 15.4                   | 10.3       | 10.3                   |  |  |
| 75-84 years  | 105.1                             | 122.9                  | 84.8       | 98.2                   | 120.3      | 141.4                  |  |  |
| 85 years +   | 439.1                             | 460.5                  | 379.6      | 406.0                  | 466.8      | 487.2                  |  |  |

| Ama Cuaum    | U.S. All Races |       |         | U.S. White |       |         |
|--------------|----------------|-------|---------|------------|-------|---------|
| Age Group    | Both Sexes     | Male  | Female  | Both Sexes | Male  | Female  |
|              |                |       |         |            |       |         |
| Under 1 year | *              | *     | *       | *          | *     | *       |
| 1-4 years    | *              | *     | *       | *          | *     | *       |
| 5-14 years   | *              | *     | *       | *          | *     | *       |
| 15-24 years  | *              | *     | *       | *          | *     | *       |
| 25-34 years  | *              | *     | *       | *          | *     | *       |
| 35-44 years  | *              | *     | *       | *          | *     | *       |
| 45-54 years  | 0.2            | 0.1   | 0.2     | 0.2        | 0.1   | 0.3     |
| 55-64 years  | 2.1            | 1.9   | 2.3     | 2.3        | 2.1   | 2.5     |
| 65-74 years  | 20.2           | 19.0  | 21.2    | 20.8       | 19.4  | 22.0    |
| 75-84 years  | 177.0          | 156.5 | 191.0   | 182.7      | 160.4 | 198.2   |
| 85 years +   | 935.5          | 710.7 | 1,035.4 | 962.5      | 728.7 | 1,067.0 |

<sup>--\*</sup> Represents zero.

<sup>1</sup>/Adjusted to compensate for misreporting of Al/AN race on state death certificates.

SOURCE: Rates for U.S. All Races and U.S. White: Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov.

# CHART 27—LEADING CAUSES OF HOSPITALIZATION FOR FEMALES, IHS AND TRIBAL DIRECT AND CONTRACT GENERAL HOSPITALS, FY 2012

For Al/AN females, 26.4 percent of all discharges from IHS and Tribal direct and contract general hospitals pertain to obstetric deliveries and complications of pregnancy and the puerperium. This is followed by digestive system diseases (10.7 percent) and respiratory system diseases (10.3 percent). For Al/AN males, the top three causes are digestive system diseases, respiratory system diseases, and injury and poisoning.

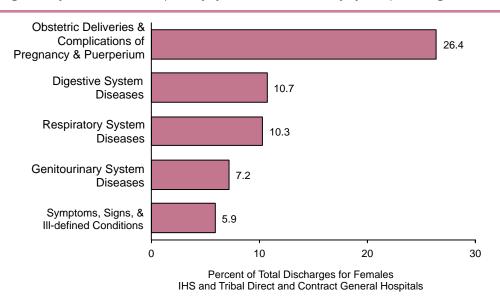


TABLE 27—TEN LEADING CAUSES OF HOSPITALIZATION BY SEX,
INDIAN HEALTH SERVICE AND TRIBAL DIRECT AND CONTRACT GENERAL HOSPITALS,
FY 2012

| Male  |                         |                     | Female   |                         |                     |
|---|-------------------------|---------------------|--|-------------------------|---------------------|
| Diagnostic Category                                 | Number of<br>Discharges | Percent<br>of Total | Diagnostic Category  | Number of<br>Discharges | Percent<br>of Total |
| All Categories                                      | 27,066                  | 100.0               | All Categories   | 38,005                  | 100.0               |
| Digestive system diseases                           | 3,711                   | 13.7                | Obstetric deliveries & complications of pregnancy & puerperium | 10,017                  | 26.4                |
| Respiratory system diseases                         | 3,678                   | 13.6                | Digestive system diseases                                      | 4,075                   | 10.7                |
| Injury & poisoning                                  | 2,986                   | 11.0                | Respiratory system diseases                                    | 3,930                   | 10.3                |
| Circulatory system diseases                         | 2,553                   | 9.4                 | Genitourinary system diseases                                  | 2,738                   | 7.2                 |
| Mental disorders                                    | 2,053                   | 7.6                 | Symptoms, signs, & ill-defined conditions                      | 2,230                   | 5.9                 |
| Skin & subcutaneous tissue diseases                 | 2,010                   | 7.4                 | Injury & poisoning   | 2,197                   | 5.8                 |
| Symptoms, signs, & ill-defined conditions           | 1,889                   | 7.0                 | Circulatory system diseases                                    | 1,977                   | 5.2                 |
| Endocrine, nutritional, & metabolic disorders       | 1,773                   | 6.6                 | Supplementary classification                                   | 1,837                   | 4.8                 |
| Supplementary classification                        | 1,309                   | 4.8                 | Endocrine, nutritional, & metabolic disorders                  | 1,530                   | 4.0                 |
| Musculoskeletal system & connective tissue diseases | 1,212                   | 4.5                 | Skin & subcutaneous tissue diseases                            | 1,473                   | 3.9                 |
| All other   | 3,892                   | 14.4                | All other  | 6,001                   | 15.8                |

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# CHART 28—LEADING CAUSES OF AMBULATORY MEDICAL VISITS FOR FEMALES, IHS AND TRIBAL DIRECT AND CONTRACT FACILITIES, FY 2012

For Al/AN females and males, the two leading causes of ambulatory medical visits in IHS and Tribal direct and contract facilities are supplementary classification conditions and endocrine, nutritional, and metabolic disorders. The sexes differ on the third leading cause -- for females it is musculoskeletal system diseases and for males it is mental disorders.

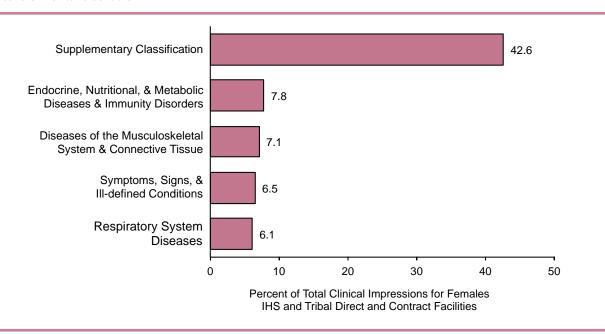


TABLE 28—TEN LEADING CAUSES OF AMBULATORY MEDICAL CLINICAL IMPRESSIONS BY SEX, INDIAN HEALTH SERVICE AND TRIBAL DIRECT AND CONTRACT HOSPITALS, FY 2012

| Male  |                                      |                     | Female  |                                      |                     |
|---|--------------------------------------|---------------------|---|--------------------------------------|---------------------|
| Diagnostic Category                                 | Number<br>of Clinical<br>Impressions | Percent<br>of Total | Diagnostic Category                                 | Number<br>of Clinical<br>Impressions | Percent<br>of Total |
| All Categories                                      | 5,204,928                            | 100.0               | All Categories                                      | 8,050,630                            | 100.0               |
| Supplementary classification                        | 2,045,167                            | 39.3                | Supplementary classification                        | 3,432,306                            | 42.6                |
| Endocrine, nutritional, & metabolic disorders       | 472,674                              | 9.1                 | Endocrine, nutritional, & metabolic disorders       | 630,475                              | 7.8                 |
| Mental disorders                                    | 341,993                              | 6.6                 | Musculoskeletal system & connective tissue diseases | 568,901                              | 7.1                 |
| Musculoskeletal system & connective tissue diseases | 331,581                              | 6.4                 | Symptoms, signs, & ill-defined conditions           | 520,689                              | 6.5                 |
| Circulatory system diseases                         | 327,430                              | 6.3                 | Respiratory system diseases                         | 490,050                              | 6.1                 |
| Respiratory system diseases                         | 325,412                              | 6.3                 | Mental disorders                                    | 445,244                              | 5.5                 |
| Symptoms, signs, & ill-defined conditions           | 312,649                              | 6.0                 | Nervous system & sense organ diseases               | 439,983                              | 5.5                 |
| Nervous system & sense organ diseases               | 304,416                              | 5.8                 | Circulatory system diseases                         | 325,576                              | 4.0                 |
| Injury & poisoning                                  | 223,107                              | 4.3                 | Genitourinary system diseases                       | 251,967                              | 3.1                 |
| Skin & subcutaneous tissue diseases                 | 157,508                              | 3.0                 | Injury & poisoning                                  | 216,197                              | 2.7                 |
| All other   | 362,991                              | 7.0                 | All other   | 729,242                              | 9.1                 |

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# Glossary

#### GLOSSARY OF ICD-10 CODES LIST OF 113 CAUSES OF DEATH (1999-PRESENT)

| CAUSE OF DEATH  | ICD-10 CODES  |
|---|---|
| Salmonella infections   | A01-A02   |
| Shigellosis and amebiasis   | A03, A06  |
| Certain other intestinal infections   | A04, A07-A09  |
| Tuberculosis Respiratory Tuberculosis Other Tuberculosis  | A16-A19<br>A16<br>A17-A19                                       |
| Whooping cough  | A37   |
| Scarlet fever and erysipelas  | A38, A46  |
| Meningococcal infection   | A39   |
| Septicemia  | A40-A41   |
| Syphilis  | A50-A53   |
| Acute poliomyelitis   | A80   |
| Arthropod-borne viral encephalitis  | A83-A84, A85 2  |
| Measles   | B05   |
| Viral Hepatitis   | B15-B19   |
| Human immunodeficiency virus (HIV) disease  | B20-B24   |
| Malaria   | B50-B54   |
| Other and unspecified infections and parasitic diseases and their sequelae  |   |
| A42-A44, A48-A49, A54-A79   |   |
| Malignant neoplasm of lip, oral cavity and pharynx Malignant neoplasm of esophagus Malignant neoplasm of stomach Malignant neoplasm of colon, rectum, anus Malignant neoplasm of liver and intrahepatic bile ducts Malignant neoplasm of pancreas Malignant neoplasm of larynx Malignant neoplasm of trachea, bronchus and lung Malignant melanoma of skin Malignant neoplasm of cervix uteri | C00-C97 C00-C14 C15 C16 C18-C21 C22 C25 C32 C33-C34 C43 C50 C53 |
| Malignant neoplasm of corpus uteri and uterus, part unspecified  Malignant neoplasm of ovary  | C54-C55<br>C56  |
| Malignant neoplasm of prostate  | C61   |
| Malignant neoplasm of kidney and renal pelvis   | C64-C65   |

| Other disorders of circulatory system   | 180-199   |
|---|---|
| Influenza and pneumonia<br>Influenza<br>Pneumonia   | J10-J18<br>J10-J11<br>J12-J18                     |
| Other acute lower respiratory infections  Acute bronchitis and bronchiolitis  Unspecified acute lower respiratory infection   | J20-J22<br>J20-J21<br>J22                         |
| Chronic lower respiratory diseases Bronchitis chronic and unspecified Emphysema Asthma Other chronic lower respiratory diseases   | J40-J47<br>J44, J47<br>J43<br>J45-J46<br>J44, J47 |
| Pneumoconioses and chemical effects   | J60-J66, J68                                      |
| Pneumonitis due to solids and liquids   | J69   |
| Other diseases of respiratory system  | J00-J06, J30-J39, J67, J70-J98                    |
| Peptic ulcer  | K25-K28   |
| Diseases of appendix  | K35-K38   |
| Hernia  | K40-K46   |
| Chronic liver disease and cirrhosis  Alcoholic liver disease  Other chronic liver disease and cirrhosis   | K70, K73-K74<br>K70<br>K73-K74                    |
| Cholelithias and other disorders of gall bladder  | K80-K82   |
| Nephritis, nephritic syndrome and nephrosis  Acute and rapidly progressive nephritic and nephritic syndrome  Chronic glomerulonephritis, nephritis and nephropathy not specifie | N00-N07, N17-N19, N25-N27<br>N00-N01, N04<br>d as |
| acute or chronic, and renal sclerosis unspecified Renal failure Other disorders of kidney   | N02-N03, N05-N07, N26<br>N17-N19<br>N25, N27      |
| Infections of kidney  | N10-N12, N13 6, N15 1                             |
| Hyperplasia of prostate   | N40   |
| Inflammatory diseases of female pelvic organs   | N70-N76   |
| Pregnancy, childbirth and the puerperium Pregnancy with abortive outcome Other complications of pregnancy, childbirth and the puerperium  | O00-O99<br>O00-O07<br>O10-O99                     |
| Certain conditions originating in the perinatal period  | P00-P96   |
| Congenital malformations, deformations and chromosomal abnormalit   | cies Q00-Q99                                      |
| Symptoms, signs, and abnormal clinical and laboratory findings not elsewhere classified   | R00-R99   |

All other diseases Residual V01-X59, Y85-Y86 Accidents (unintentional injuries) **Transport accidents** V01-V99, Y85 Motor vehicle accidents V02-V04, V09 0-V09 2, V12-V14, V19 0-V19 2, V19 4-V19 6, V20-V79, V80 3-V80 5, V81 0-V81 1, V82 0-V82 1, V83-V86, V87 0-V87 8, V88 0-V88 8, V89 0, V89 2 Other land transport accidents V01, V05-V06, V09 1, V09 3-V09 9, V10-V11, V15-V18, V19 3, V19 8-V19 9, V80 0-V80 2, V80 6-V80 9, V81 2-V81 9, V82 2-V82 9, V87 9, V88 9, V89 1, V89 3, V89 9 Water, air and space and other and unspecified transport accidents and their sequelae V90-V99, Y85 Nontransport accidents W00-X59, Y86 **Falls** W00-W19 Accidental discharge of firearms W32-W34 Accidental drowning and submersion W65-W74 Accidental exposure to smoke, fire and flames X00-X09 Accidental poisoning and exposure to noxious substances X40-X49 Other and unspecified nontransport accidents and their sequelae W20-W31, W35-W64, W75-W99, X10-X39, X50-X59, Y86 Intentional self-harm (suicide) U03, X60-X84, Y87 0 Intentional self-harm (suicide) by discharge of firearms X72-X74 Intentional self-harm (suicide) by other and unspecified means and their sequelae U03, X60-X71, X75-X84, Y87 0 Assault (homicide) U01-U02, X85-Y09, Y87 1 Assault (homicide) by discharge of firearms U01 4, X93-X95 Assault (homicide) by other and unspecified means and their sequelae U01 0-U01 3 U01 5-U01 9, U02, X85-X92, X96-Y09, Y87 1 Legal intervention Y35, Y89 0 Events of undetermined intent Y10-Y34, Y87 2, Y89 9 Discharge of firearms, undetermined intent Y22-Y24 Other and unspecified events of undetermined intent and their sequelae Y10-Y21, Y25-Y34, Y87 2, Y89 9 Operations of war and their sequelae Y36, Y89 1

Complications of medical and surgical care

Y40-Y84, Y88

#### List of 130 Causes of Infant Death (1999-present)

| List of 130 Causes of Infant Death (1999-present)   |   |
|---|---|
| Cause of Death  | ICD-10 Codes                                |
| Certain infections and parasitic diseases   | A00-B99                                     |
| Certain intestinal infectious diseases  | A00-A08                                     |
| Diarrhea and gastroenteritis of infectious origin   | A09   |
| Tuberculosis  | A16-A19                                     |
| Tetanus   | A33, A35                                    |
| Diptheria   | A36   |
| Whooping cough  | A37   |
| Meningococcal infection   | A39   |
| Septicemia  | A40-A41                                     |
| Congenital syphilis   | A50   |
| Gonococcal infection  | A54   |
| Viral diseases  | A80-B34                                     |
| Acute poliomyelitis   | A80   |
| Varicella (chickenpox)  | B01   |
| Measles   | B05   |
| Human immunodeficiency virus (HIV) disease  | B20-B24                                     |
| Mumps   | B26   |
| Other and unspecified viral diseases  | A81-B00, B02-B04, B06-B19, B25, B27-B34     |
| Candidiasis   | B37   |
| Malaria   | B50-B54                                     |
| Pneumocystosis  | B59   |
| All other and unspecified infectious and parasitic dise   |   |
| A42-A49, A51-A53, A   | .55-A79, B35-B36, B38-B49, B55-B58, B60-B99 |
| Neoplasm  | C00-D48                                     |
| Malignant neoplasm  | C00-C97                                     |
| Hodgkin's disease and non-Hodgkin's lymphomas   | C81-C85                                     |
| Leukemia  | C91-C95                                     |
| Other and unspecified malignant neoplasm  | C00-C80, C88-C90, C96-C97                   |
| In situ neoplasm, benign, neoplasm and neoplasm of  |   |
| or unknown behavior   | D00-D48                                     |
| Diseases of the blood and blood forming organs and cer  | tain disorders                              |
| involving the immune mechanism  | D50-D89                                     |
| Anemias   | D50-D64                                     |
| Other diseases of blood and blood forming organs  | D65-D76                                     |
| Certain disorders involving the immune mechanism  | D80-D89                                     |
| Endocring nutritional and metabolic diseases  | E00-E88                                     |
| Endocrine, nutritional and metabolic diseases  Short stature, not elsewhere classified  | E34 3                                       |
| Malnutrition and other nutritional deficiencies   | E40-E64                                     |
| Cystic fibrosis   | E84   |
| Volume depletion, disorders of fluid, electrolyte and   |   |
| All other endocrine, nutritional and metabolic disease  |   |
| , 0 | E34 4-E34 9, E65-E83, E85, E88              |
|   |   |
| Diseases of the nervous system  | G00-G98                                     |
| Meningitis  | G00, G03                                    |
|   |   |

| Infantile spinal muscular atrophy, type I (Werdnig-Hoffman) Infantile cerebral palsy   | G12 0<br>G80  |
|--|---|
| Anoxic brain damage, not elsewhere classified  | G93 1   |
| Other diseases of nervous system G12 1-G12 9, G20-G72, G81-G92, G93  | G04, G06-G11,   |
|  |   |
| Diseases of the ear and mastoid process  | H60-H93   |
| Diseases of the circulatory system Pulmonary heart disease and diseases of pulmonary circulation Pericarditis, endocardititis and myocarditis Cardiomyopathy Cardiac arrest Cerebrovascular disease All other diseases of the circulatory system  100-125, I31, I34-I3 | 100-199<br>126-128<br>130, 133, 140<br>142<br>146<br>160-169<br>38, 144-145, 147-151, 170-199 |
| Diseases of the respiratory system   | J00-J98   |
| Acute upper respiratory infections   | J00-J06   |
| Influenza and pneumonia  | J10-J18   |
| Influenza<br>Pneumonia   | J10-J11<br>J12-J18  |
| Acute bronchitis and acute bronchiolitis   | J20-J21   |
| Bronchitis, chronic and unspecified Asthma   | J40-J42<br>J45-J46  |
| Pneumonitis due to solids and liquids  | J69   |
| Other and unspecified diseases of the respiratory system   | J22, J30-J39, J43-J44,<br>J47-J68, J70-J98  |
| Diseases of the digestive system   | K00-K92   |
| Gastritis, duodenitis, and noninfective enteritis and colitis  Hernia of abdominal cavity and intestinal obstruction without hernia  | K29, K50-K55<br>K40-K46, K56  |
|  | 00-K28, K30-K38, K57-K92  |
| Diseases of the genitourinary system   | N00-N95   |
| Renal failure and other diseases of the kidney  Other and unspecified diseases of the genitourinary system  N00-N15  | N17-N19, N25, N27<br>5, N20-N23, N26, N28-N95   |
| Certain conditions originating in the prenatal period  | P00-P96   |
| Newborn affected by maternal factors and by complications of pregnan   | _   |
| labor and delivery Newborn affected by maternal hypertensive disorders   | P00-P04<br>P00 0  |
| Newborn affected by other maternal conditions which may be unrelated   |   |
| to present pregnancy   | P00 1- P00 9  |
| Newborn affected by maternal complications of pregnancy Newborn affected by incompetent cervix   | P01<br>P01 0  |
| Newborn affected by premature rupture of membranes   | P01 1   |
| Newborn affected by multiple pregnancy Newborn affected by other maternal complications of pregnancy   | P01 5<br>P01 2-P01 4, P01 6-P01 9   |
| Newborn affected by complications of placenta, cord, and membranes   | P02   |
| Newborn affected by complications involving placenta   | P02 0-P02 3   |
| Newborn affected by complications involving cord<br>Newborn affected by chorioamnionitis   | P02 4-P02 6<br>P02 7  |
|  |   |

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| Newborn affected by other and unspecified abnormalities of membranes<br>Newborn affected by other complications of labor and delivery<br>Newborn affected by noxious influences transmitted via placenta or breast   | P02 8-P02 9<br>P03<br>t milk P04  |
|--|---|
| Disorders related to length of gestation and fetal malnutrition Slow fetal growth and fetal malnutrition Disorders related to short gestation and low birth weight not elsewhere cl Extremely low birth weight or extreme immaturity Other low birth weight or preterm Disorders related to long gestation and high birth weight   | P05-P08<br>P05<br>lassified P07<br>P07 0-P07 2<br>P07 1, P07 3<br>P08                             |
| Birth trauma   | P10-P15   |
| Intrauterine hypoxia and birth asphyxia<br>Intrauterine hypoxia<br>Birth asphyxia  | P20-P21<br>P20<br>P21   |
| Respiratory distress of newborn  | P22   |
| Other respiratory conditions originating in the perinatal period Congenital pneumonia Neonatal aspiration syndromes Interstitial emphysema and related conditions originating in the perinatal Pulmonary hemorrhage originating in the perinatal period Chronic respiratory disease originating in the perinatal period Atelectasis All other respiratory conditions originating in the perinatal period | P23-P28 P23 P24 period P25 P26 P27 P28 0-P28 1 P28 2-P28 9  |
| Infections specific to the perinatal period Bacterial sepsis of newborn Omphalitis of newborn with or without mild hemorrhage All other infections specific to the perinatal period  | P35-P39<br>P36<br>P38<br>P35, P37, P39  |
| Hemorrhagic and hematological disorders of newborn Neonatal hemorrhage Hemorrhagic disease of newborn Hemolytic disease of newborn due to isoimmunization and other perinata Hematological disorders   | P50-P61<br>P50-P52, P54<br>P53<br>I jaundice P55-P59<br>P60-P61                                   |
| Syndrome of infant of a diabetic mother and neonatal diabetes mellitus   | P70 0-P70 2   |
| Necrotizing enterocolitis of newborn   | P77   |
| Hydrops fetalis not due to hemolytic disease Other perinatal conditions P29, P70 3-P76, P78-P81, P83 0-P83   | P83 2<br>1, P83 3-P83 9, P90-P96  |
| Congenital malformations, deformations and chromosomal abnormalities Anencephaly and similar malformations Congenital hydrocephalus Spina bifida Other congenital malformations of the nervous system Congenital malformations of heart Other congenital malformations of circulatory system Congenital malformations of respiratory system Congenital malformations of digestive system                 | Q00-Q99<br>Q00<br>Q03<br>Q05<br>Q01-Q02, Q04, Q06-Q07<br>Q20-Q24<br>Q25-Q28<br>Q30-Q34<br>Q35-Q45 |

Congenital malformations genitourinary system Q50-Q64 Congenital malformations and deformations of musculoskeletal system, limbs and integument Q65-Q85 Down's syndrome Q90 Edwards syndrome Q91 0-Q91 3 Patau's syndrome Q91 4-Q91 7 Other congenital malformations and deformations Q10-Q18, Q86-Q89 Other chromosomal abnormalities, not elsewhere classified Q92-Q99 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified R00-R99 Sudden infant death syndrome **R95** Other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified R00-R53, R55-R59 4, R96-R99 All other diseases F01-F99, H00-H57, L00-M99 External causes of mortality U01, V01-Y84 Accidents (unintentional injuries) V01-X59 Transport accident V01-V99 Motor vehicle accidents V02-V04, V09 0, V09 2, V12-V14, V19 0-V19 2, V19 4-V19 6, V20-V79, V80 3,-V80 2, V80 6-V80 5, V81 0-V81 1, V82 0-V82 1, V83-V86, V87 0-V87 8, V88 0-V88 8, V89 0, V89 2 Other unspecified transport accidents V01, V05-V06, V09 1, V09 3-V09 9, V10-V11, V15-V18, V19 3, V19 8, V19 9, V80 0-V80 2, V80 6-V80 9, V81 2-V81 9, V82 2-V82 9, V87 9, V88 9, V89 1, V89 3, V89 9, V90-V99 Falls W00-W19 Accidental discharge of firearms W32-W34 Accidental drowning and submersion W65-W74 Accidental suffocation and strangulation in bed W75 Other accidental suffocation and strangulation W76-W77, W81-W84 Accidental inhalation and ingestion of food or other objects causing obstruction of respiratory tract W78-W80 Accidents caused by exposure to smoke, fire and flames X00-X09 Accidental poisoning and exposure to noxious substances X40-X49 Other and unspecified accidents W20-W31, W35-W64, W85-W99, X10-X39, X50-X59 Assault (homicide) X85-Y09 Assault (homicide) by hanging, strangulation and suffocation X91 Assault (homicide) by discharge of firearms X93-X95 Neglect, abandonment and other maltreatment syndromes Y06-Y07 Assault (homicide) by other and unspecified means U01 0-U01 3 X85-X90, X92, X96-X99, Y00-Y05, Y08-Y09 Complications of medical and surgical care Y40-Y84 Other external causes X60-X84, Y10-Y36

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#### Additional causes of death and their corresponding ICD-10 Codes (1999-present)

(These categories are not included as part of the 113 cause of death or 130 causes of infant death lists. They are independent of these two lists but are valid cause of death codes to use for the causes indicated.)

Cause of Death ICD-10 Codes

Alcohol-related deaths E24 4, F10, G31 2, G62 1, G72 1,

142 6, K29 2, K70, K85 2, K86 0, R78 0, X45, X65, Y15

Breast cancer (females) C50

Cervical cancer C53

Colon-rectal-cancer C18-C21

Drug-related deaths D52 1, D59 0, D59 2, D61 1, D64 2, E06 4, E16 0,

E23 1, E24 2, E27 3, E66 1, F11-F11 5, F11 7-F11 9, F12-F12 5, F12 7-F12 9,

F13-F13 5, F13 7-F13 9, F14-F14 5, F14 7-F14 9, F15-F15 5, F15 7-F15 9,

F16-F16 5, F16 7-F16 9, F17 0, F17 3-F17 5, F17 7-F17 9, F18-F18 5, F18 7-F18 9,

F19-F19 5, F19 7-F19 9, G21 1, G24 0, G25 1, G25 4, G25 6, G44 4, G62 0, G72 0,

195 2, J70 2-J70 4, L10 5, L27 0-L27 1, M10 2, M32 0, M80 4, M81 4, M83 5, M87 1, R78 1-R78 5, X40-X44, X60-X64, X85, Y10-Y14

Firearm deaths W32-W34, X72-X74, X93-X95, Y22-Y24, Y35 0, U01 4

Gastrointestinal disease deaths A03-A03 3, A03 8-A03 9, A04, A06 1-A06 2,

A06 4-A06 9, A07 0-A07 3, A07 8-A07 9, A08-A08 3, A08 5, A09,

K29-K29 1, K50 0-K50 1, K50 8-K50 9, K51 0- K51 4, K51 8-K51 9,

K52 0-K52 1, K52 8-K57 9

**B24** 

Human Immunodeficiency virus (HIV) infection

Lung cancer C33-C34

Maternal death A34, O00-O95, O98-O99

Other injuries Y10-Y21, Y25-Y34, Y36, Y87 2, Y89 1, Y89 9

Poisoning U01 6-U01 7, X40-X49 9, X60-X69 9, X85-X90 9, Y10-Y19 9, Y35 2

Prostate cancer C61, D29

#### List of ICD-9-CM Codes used in Patient Care Charts and Tables

|  | ICD-9-CM |
|--|----------|
| Condition  | Codes    |
| Infectious and parasitic diseases  | 001-139  |
| Neoplasms  | 140-239  |
| Endocrine, nutritional, and metabolic diseases and immunity disorders  | 240-279  |
| Diseases of the blood and blood-forming organs   | 280-289  |
| Mental disorders   | 290-319  |
| Diseases of the nervous system and sense organs  | 320-389  |
| Diseases of the circulatory system   | 390-459  |
| Diseases of the respiratory system   | 460-519  |
| Diseases of the digestive system   | 520-579  |
| Diseases of the genitourinary system   | 580-629  |
| Complications of pregnancy, childbirth, and the puerperium   | 630-679  |
| Diseases of the skin and subcutaneous tissue   | 680-709  |
| Diseases of the musculoskeletal system and connective tissue   | 710-739  |
| Congenital anomalies   | 740-759  |
| Certain conditions originating in the perinatal period   | 760-779  |
| Symptoms, signs, and ill-defined conditions  | 780-799  |
| Injury and poisoning   | 800-999  |
| Supplementary classification (classification of factors influencing health status and contact with health service) | V01-V89  |

#### **Method Used to Rank Leading Sites of Cancer Deaths**

|   | ICD -9  |
|---|---|
| Site of Cancer Death  | Codes   |
| Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissu   | ues 140-208   |
|   | 140-149<br>140<br>141<br>146-149 0<br>142-145,149 1-149 9   |
| Malignant neoplasms of digestive organs and peritoneum  #Of esophagus  #Of stomach  #Of small intestine, including duodenum  #Of colon  Hepatic and splenic flexures and transverse colon  Descending colon  Sigmoid colon  #Cecum, appendix, and ascending colon  Other and colon, unspecified  #Of rectum, rectosigmoid junction, and anus  #Of liver and intrahepatic bile ducts  Liver, primary  Intrahepatic bile ducts  Liver, not specified as primary or secondary  #Of gallbladder and extrahepatic bile ducts  #Of pancreas  Of retroperitoneum, peritoneum, and other and ill-defined sites within the digestive organs and peritoneum | 150-159<br>150<br>151<br>152<br>153<br>153 0-153 1,153 7<br>153 2<br>153 3<br>153 4-153 6<br>153 8-153 9<br>154<br>155<br>155<br>155<br>155<br>155 1<br>155 2<br>156<br>157 |
| Malignant neoplasms of respiratory and intrathoracic organs #Of larynx #Of trachea, bronchus, and lung Of all other and ill-defined sites within the respiratory system and intrathoracic organs  | 160-165<br>161<br>162<br>160,163-165  |
| Malignant neoplasms of bone, connective tissue, skin, and breast #Of bone and articular cartilage #Of connective and other soft tissue #Melanoma of skin Other malignant neoplasms of skin #Of female breast #Of male breast  | 170-175<br>170<br>171<br>172<br>173<br>174<br>175   |

The causes designated by the symbol # were ranked to designate the leading sites of cancer deaths

#### Method Used to Rank Leading Sites of Cancer Deaths (cont'd)

|  | ICD -9   |
|--|--|
| Site of Cancer Death   | Codes  |
| Maligant neoplasms of genital organs  #Of cervix uteri Of other parts of uterus  #Of ovary and other uterine adnexa Of other and unspecified female genital organs  #Of prostate  #Of testis  #Of penis and other male genital organs  | 179-187<br>180<br>179,181-182<br>183<br>184<br>185<br>186                      |
| Malignant neoplasms of urinary organs #Of bladder #Of kidney and other and unspecified urinary organs  | 188-189<br>188<br>189  |
| Malignant neoplasms of other and unspecified sites  #Of eye  #Of brain  Of other and unspecified parts of nervous system  #Of thyroid gland and other endocruine glands and related structures  Of all other and unspecified sites   | 190-199<br>190<br>191<br>192<br>193-194<br>195-199                             |
| Malignant neoplasms of lymphatic and hematopoietic tissues  #Lymphosarcoma and reticulosarcoma  #Hodgkin's disease Other malignant neoplasms of lymphoid and histiocytic tissue  #Multiple myeloma and immunoproliferative neoplasms  #Leukemia Lymphoid leukemia Myeloid leukemia Monocytic leukemia Other and unspecified leukemia | 200-208<br>200<br>201<br>202<br>203<br>204-208<br>204<br>205<br>206<br>207-208 |

The causes designated by the symbol # were ranked to designate the leading sites of cancer deaths



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